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SALT WATER

FISHERMEN'S

PARADISE

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DEPARTMENT OF
AGRICULTURE

STATE OF FLORIDA
TALLAHASSEE

NATHAN MAYO,
COMMISSIONER



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Big Game Fishermen's Paradise

A COMPLETE TREATISE

(Fully Illustrated)

on angling philosophy, sidelights and scenes in Florida salt-water
fishing ventures.

—With—

Descriptions of prominent gamefish species, their size, build, characteris-
tics, habitats, game qualities, tackle and baits, and angling methods.

Interspersed with anecdotes and narratives on angling rites.

By Moise N. Kaplan



Compliments of

STATE OF FLORIDA
DEPARTMENT OF AGRICULTURE
Tallahassee

NATHAN MAYO, Commissioner
T. J. BROOKS, Asst. Commissioner
June, 1936

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MOISE N. KAPLAN, ATLANTA, GA.

There are no dull subjects, only poor writers.

—Anonymous.

No book but some good is contained in it.

—Cervantes.

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ANGLIMANIA (FISHING DISEASE)

*I envy nobody but him, and him only,
who catches more fish than I do.*
—Izaak Walton, "The Compleat Angler."



ANKIND IS subject to a variety of strange afflictions. One is a genuine blessing. Those who are addicted to the infatuation known as *fishing* are more than fortunate. It is a desirable malady. No one afflicted with it has ever been known to recover, because its victims do nothing to cure themselves. On the contrary they do everything possible to let it get a closer grip on them. This is the only disease which man is heir to that benefits and lengthens the life of its victims.

The disposition to "go fishing" is so deep-rooted in some addicts that it cries for expression continuously, from youth to the sunset years of life. Game fishing is officially recognized by both national and state governments as a sport which returns dividends in health and recreation worth many times the actual expense incurred in the pastime. Nearly ten million Americans participate in this great outdoor, wholesome and invigorating lure. According to U. S. census bureau figures, it is second only to golf among national sports (based upon the annual expenditure for equipment). The Encyclopaedia Britannica (14th edition, vol. 1, p. 941) states that since 1918 new devotees to the sport of deep-sea angling are more than any other sport.

Those fortunate fellows who have experienced deep-sea angling have ventured with nature's god, *Oceanus*. They have visited a world-apart. To these happy mortals has come a gratification as satisfying as it is indescribable. They find

in it a singular enrichment of life—one to which the remainder of mankind is alien. Its delightful romance and stimulation cannot be understood, much less appreciated, by the uninitiated. It provides the calmest outlet for pent-up emotions and surplus energy; it affords the most welcome escape from daily drudgery; it creates a sense of inner exhilaration. Most important, it permits tired bodies and minds to make a complete recovery.

Unlike other so-called sports, angling carries its devotees away from the fanfare and plaudits of crowded arenas. When the salt-water angler cruises out to sea all exacting customs, social status and aspirations for pecuniary gain are left ashore. In their stead come honor and chivalry. Alone—except for choice companions—unhurried, undisturbed, relaxed! Youth quietly and peacefully regained while the fisherman indulges in this favorite hobby!

During each day so spent the piscator's fondest expectations come to pay him visit. Thrills and adventures, without comparison in the entire realm of sporting endeavor! Each happy and eventful, carefree day that ends leaves him replete with new surprises and experiences! Even his craft participates in the triumphant sensations as it is guided into a safe harbor at a remote wharf to doze after she converses understandingly with the gentle tide. A celestial canopy set with a myriad of twinkling, inspiring, silvery stars which look on while pure sea breezes lull the angler to sleep instantly—a deep, restive and refreshing slumber.

Thereafter he is truly blessed with a hallowed memory. Even when conditions beyond his control do not permit the physical pilgrimage to this shrine, the devout angler is no less fortunate: he is expressly privileged, and resorts to *mental* fishing journeys. It is on such a mental voyage that you are now permitted to accompany a devout member of the *GRAND FISHING FRATERNITY*.

THE STORY OF THIS BOOK

These soothing thoughts on deep-sea or salt-water angling were originally assembled (in brief form) for devout fishermen during the National Bank holiday in March, 1933. After the "holiday" was proclaimed your humble *Dean of Fishing* found it difficult to continue his efforts "selling money for future delivery." Reasoned your essayist, "Everyone appears to be crazy about something or other; the world has become an asylum. Better escape from it."

The solution was born in our brain that by taking a *mental* fishing journey the New Dealers could be left free to solve the nation's problems. So, a summary of the manifold reasons for the mental angling jaunt was ordered kept. These gratifying thoughts were assembled in fairly logical order—and given the title, "Defense Offered in the Murder of A Fish"—and rushed to a printer, who dared continue operations notwithstanding the "bank holiday."

The printing establishment inquired "How many copies are desired?" to which our messenger-envoy "thought fifty copies would be enough." With characteristic accuracy the pressman ceased his labor on this job when the last of the fifty copies had been "struck off"; then this efficient individual tore down the type forms, destroyed the plates and sent us a bill. Later, when this printing genius was asked, "Why didn't you make some additional copies when the brochure was all set up?" with a smile peculiar to persons in that industry came this instinctive response, "I was taught to follow the copy and that I do even if I have to go out of the top story window with it."

The fifty copies went smilingly on their way to the delight of the members of the *Grand Fishing Fraternity* who received them. In their enthusiasm (for the sport—not the brochure) they have caused numerous requests for additional copies to be sent to others afflicted with anglomania, many in far away places. Being an accommodating gentleman, as well as a devout angler, I cannot let these pleas go unheeded. Therefore, the original manuscript is resurrected, enlarged and re-edited. The result is the present fluent treatise.

In addition to angling philosophy, preceded by satire on mankind's customs, and historical facts concerning the scenic

and other aspects of the colorful, sunny, tropical surroundings in which this labor of love is performed, this edition is intended to convey interesting depicments on the past-masters of the *Grand Fishing Fraternity*. It also contains comments on the lower Florida coasts, the keys, the adjacent Gulf Stream current, the Everglades and its rivers. The "Gibraltar of the Gulf" (Fort Jefferson National Monument at Dry Tortugas) with the origin and reasons for the assembly of oceanic robbers on the Spanish Main, is appropriately included. The primary purpose of the book is accomplished by condensed comment on and interesting scientific data concerning the more important salt-water game-fishes of Florida waters, their distinguishing features and behavior, extraordinary traits, angling rites and methods, the recommended tackle and bait, preferred times and places to seek them, and records thus far established. The whole is interspersed with verbal floatsam and jetsam, proverbs and quotations, in addition to dashes of wit, wisdom and humor.

The compilation is elaborately illustrated with photographs, drawings, charts and sundry fish lore.

If the subject matter gives our readers as much pleasure as has been the author's in assembling it, the purpose of this work will be achieved.

"UNCLE MOISE"

May, 1936.



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CHAPTER ONE

Defense Offered in the Murder of a Fish

"O, wearysome condition of humanity . . ."—Lord Brooke, *Mustapha*, Act. V.

"This strange disease of modern life"—Arnold, *The Scholar Gypsy*.

Argument from History: Angling by the Ancients—Among Logicians and Philosophers—Other Disciples—Among the Moderns—Our Debt to Anglers—Fish Epicures: the Real Culprits—Anglers' Dogma—The Road to Contentment—Principium.



Homo Sapiens Americanus, a member of the *GRAND FISHING FRATERNITY*, am accused of wantonly ending the existence of a fish. To this charge I plead guilty. But, I maintain, the motive leading up to and culminating in this tragedy finds its roots in the strenuous, maniacal life of man.

"Since the dawn of life", says an authority, "man has had forced upon him the conditions upon which he must exist; forces over which he has no control but must blindly obey—habits, which have passed into custom" Observe us:

Awakened each morning by the ringing of alarm clocks and assorted noises, we jump hurriedly from our position of temporary rest . . . Shock our tender bodies and nerve systems with cold water . . . Scratch our facial epidermis with the sharpest possible edge of steel blade . . . Proceed with the ceremony of dressing, hastily, in coarse cloth of dull and morbid pattern (Why, in a world so bright with nature's colors, do men have to wear such drab, ungraceful clothes?) . . . With starched, 4-ply yokes drawn tightly around our innocent necks, and a silken noose to make the collar-yoke fast, and heavy, clumsy, awkward leather-coverings drawn over our suffering, aching feet, we complete the task of dressing ourselves . . .

... Thus clad, we venture forth onto the noisy, heavily-jammed, roaring, traffic-lighted streets, made heinous, even perilous by speeding, clanking mechanical traffic . . .



Why, in a world so bright with nature's colors do men have to wear such drab, ungraceful clothes?

... Weary already, before the day's activities begin, we commence to wrestle with the harassing burdens of another uneventful day . . . Unceremoniously, we chain ourselves to dull, daily routine . . . The struggle continues, unabated, for days, weeks, months, years . . .

All this continuous grinding on the human system is because of man's insatiable thirst for *wealth*! For the possession of worldly objects! Not for the recuperation of his rapidly expended energy!

Worldly Gain! Apparently the highest goal of foolish, selfish man!

More Gain! Pollution in the River of Life! Fed by streams of trade-trickery, half-truths, greedy speculation! Its banks resembling an over-reaching entanglement. Commercial avarice, bitter and disappointing, misnamed "BUSINESS"!

Because of this increasing struggle under tension our muscle-cells and nerve-cells are held taut against the hard grindstone; senses become dulled; hearts hardened; souls crushed, —while our limited store of vital energy is drained off, and our bodies become mere prisons, from which we see Blind Fortune's favors, inequitably distributed! Intelligence demands that life's pathway be smoothed. Time must be afforded for leisure and relaxation—nature's most important safeguard to health.

Mankind's objective was not always governed by the distracting passion for money-making, with its attendant worry, vain-glory, selfishness, mental and physical exhaustion. We have only to turn back the pages of time to establish the truth of this fact.

Argument from History: Angling Among the Ancients

"And God said, Let them have dominion over the fishes in the sea"—Genises 1 :26
 "... for the word I speak is not mine. I refer you to a witness who is worthy of credit."—Plato, Apology.

Since earliest times there has existed a superior and dignified endeavor. It is almost as old as the world itself, as ancient as

it is honorable. It is both art and science. To escape life's hardships, great personages in the past emancipated themselves by retreating to the unspoiled waters of nature. They made the important discovery that the earth and waters surrounding it were created for man's pleasure—for him to embellish and enjoy. They "angled"¹. As the result of this form of relief from disagreeable customs the world has been immensely improved. The benefits have been handed down through thousands of years.

ADAM, the first man, it is reliably stated, fished one way or another after his forced departure from the Garden of Eden. And NOAH, of flood fame, spent much of his idle days in this manner. Probably, he conceived his holy mission—building the Ark—while fishing. For further biblical authority we find references to *fish* and *fishing* scattered in the holy writings of the earliest fathers. They refer to the sacredness of the fish, and particularly to the divine authority of the fisherman.

Ancient mythology gives an account of Glaucus, the character who proved so devout in his angling endeavors that he was raised to the sublime degree of Sea-Deity.

The number of illustrious and sacred characters who indulged in fishing activity is not known; certainly there were scores of them. Thus, JOSHUA, the great Hebrew Prophet who became the Christian Messiah, was known as "The Fisherman of Gallilee".² And Saint Peter, his right-hand man, likewise assumed the role of fisherman.

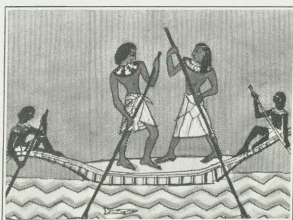
The "fish" is prominently exhibited as a sacred emblem in the painting and sculpture of the primitive church. Ancient peoples used fishes as the medium of commercial exchange; afterwards dried fishes were paid in lieu of current coins. Later, coins of our Ancients had fishes perpetuated upon them.

¹ANGLING—The taking of a fish with a line, hook and lure or artifice; a pastime or recreation. Technically the word should be employed only when the object is sport, pure and simple. *Fishing* comprises both the sport as well as the commercial aspects of the art. As now used, *fishing* conveys the meaning of angling.

²The Greek word for "fish" (ΙΧΘΥΣ) *Ichthus* (from which comes the word *Ichthyology*, science of fishes) had an anagrammatic meaning, and significance. It was the early mythical symbol for *Christus*. The initials of this word resolve themselves into what is practically a confession of faith:

"J-esus C-hrist S-on of G-od." The "sign" may still be found in relics of ancient civilizations. It identified the person as a "believer".

The early Anglo-Saxons believed in the curative power of fishes. Pickled herrings were applied to the soles of feet in fever; pilchards were valued for swelling of gums and legs. Teeth of thornbacks were broken in mortar and used in ear treat-



Objects on relics show that angling was participated in by early Egyptians. The diversion is almost as old as the world itself.

ments. Sturgeons' bones, reduced to powder, were applied to relieve rheumatic cases. Numerous other examples could be cited. This should not impress us as strange. Do not we of today give our children cod-liver oil to nourish them!

Nearly 500 pages were required by Honorable William Radcliffe, of Balliol College, England, to record some of his many findings of this subject. In his book, *Fishing From the Earliest Times* (E. P. Hutton Co., 2d edition, 1926), he skilfully traces, clearly and effectively, the logic, philosophy and humor incident to fishing activities of early peoples. This elaborate work includes references to the early Egyptians, the Assyrians, Chinese and Hebrews. To Romans and Greeks is attributed much of our present-day knowledge of species of fishes, tackle and man's ingenuity in taking fishes.

Among Logicians and Philosophers

The emotional excitement afforded by angling enabled our Past-Masters to reflect; to gather lofty inspirations. While fishing they enriched their natural abilities. Come with me to Plato's Greece, the cradle of philosophy.

SOCRATES (469-399 B. C.), high-ranking, witty and humorous Athenian, was asked, "Who is richest amongst men?" Without hesitancy, he responded, "He who is content with the least. *Contentment* is nature's riches." Of him it is said that in order to be master of his time and thoughts, Socrates spent nearly all of his seventy years of life out-of-doors; that much of his wisdom and sense of humor sprang from his fishing-leisure. During these reflective periods he was able to give his powerful thinking apparatus full play.

PLATO (428-348 B. C.), like his predecessor, angled freely and often. He prepared one of the most complete, descriptive treatises ever written on the subject of fishing. In it were included ample instructions for performing angling rites. His methods and cleverness could be followed today by anglers with success. This proves that he was well versed in the use of tackle and the capture of "pisces".

ARISTOTLE (384-322 B. C.), who inherited a large sum of money at 17, and remained 20 years as a student in "Plato's Academy", later becoming tutor of Alexander the Great, and subsequently the founder of the "Lyceum" in Athens, was the father of natural history. He made the earliest known division of animal life.

He influenced civilization for 20 centuries. Because of his masterly accomplishments and unsurpassed intellect Aristotle was early recognized as a combination of thinker, biologist, moralist, logician, founder of literary criticism, and political scientist. We are interested in him because of his clever writings on "Fish and Fishing." He waxes eloquent when he frankly admits that his great attainments were inspired while he indulged in his favorite pastime—angling.

PLUTARCH (46-120) was another logician "with a mind ever on the stretch". Brilliant writer on scholarly subjects, biographer, philosopher, he desired the world to know of his devotion to the fishing art. He recorded his angling efforts, as well as others of his age, in documentary form. Some of his depictements of fact and fancy are colorfully sketched in a variety of ways. One of these is a fanciful report of a debate before a jury, empaneled to determine whether water or land animals are the more crafty.

The writings of Plutarch—time-honored manuscripts—contain much unique lore on all kinds of fishing ventures. Never, apparently, did anyone more thoroughly enjoy the diversion than he. The victims of an emperor's decree of banishment are consoled by him, thus:

"I envy the happiness of your lot. Far removed from the intrigue, the vice and dust and misery of Rome, to the fair Aegean Island, where the sea breaks peacefully, there plenty of good fishing is to be had."

Other Disciples

In the lives and loves of others, no less prominently known than those mentioned, fishing played its part. All nations contributed a liberal share of addicts to the sport. Its powerful forces guided ways of thinking and shaped the habits and actions of people in all ages and climes.

CLEMENT of Alexandria (150-220), writer and Christian father was so infatuated with his success in piscatorial endeavor that he recommended the fish as a device for signet rings (seals).

SHAKESPEARE (1564-1616) makes Cleopatra (69BC-30AD), Queen of Egypt, who burned the midnight oil in revel with Antony, say:

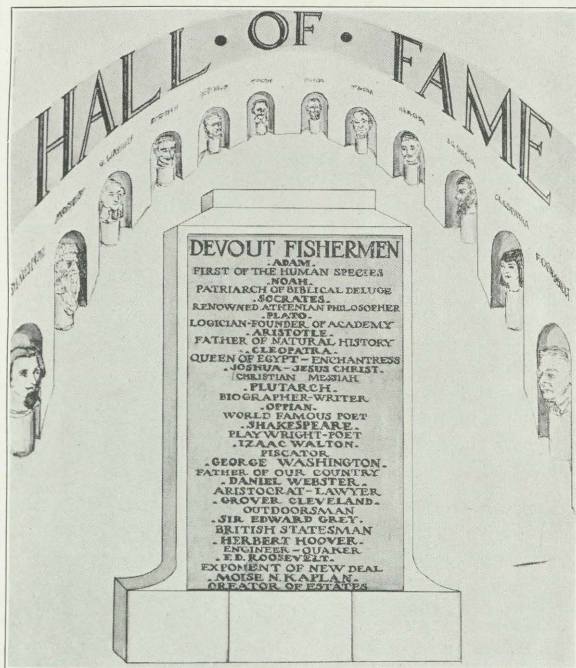
"Give me mine angle. We'll to the river. There I will betray finned fishes. My bended hook shall pierce their slimy jaws. And as I draw them up, I'll think every one an Antony."

OPPIAN (162-192 A.D.), world famous poet of Cyrus of the "glory that was Greece", was author of that wondrously abundant poem, *Halieutica*. This unsurpassed treatise embodies about 3500 lines on his favorite subject, angling. Although written nearly 19 centuries ago the poem is still considered one of the greatest ever produced. The ode is perfect metrically. In it are embodied the highest of human emotion, imagination and thought—all in perfectly-blended versification.

His rich fullness has never since been duplicated. Its harmonious qualities appeal instantly to the deepest enthusiasm for fishing. He enumerates many kinds of fishes, gives the preferred technique of engaging in the varied operations, and explains the materials (tackle) appropriate for each. Referring to it as "the lovely art", Oppian is authority for proof that all ranks and castes were "wedded heart and soul" to the angling process. The spirited passages are unspoiled by the English translation.—(Diaper & Jones, 1712).

For unique power of characterization, spontaneous humor, glowing style of construction and expression, no treatise on fishing philosophy would be complete without fraternizing with SIR IZAAK WALTON (1593-1683). Blended with his passionate love for piscatorial endeavor, yet withal so simple it is sublime, we read from his immortal work, *The Compleat Angler*:

"Angling is like poetry. Some men are born to be so."



An additional passage or two may be quoted to evidence his glorious richness of thought and soundness of reason :

"... and let me tell you this: He that reads shall find kings and priests went a-fishing. It is a harmless recreation. ... Enjoyment it does afford for idle time, which, when fishing, is no longer idly spent."

Who has fished but will testify to the truth and deeply appreciate Sir Izaak's comment that

"Angling provides a rest for the mind. It is a cheerer of spirits, a diverter of sadness, a calmer of inquiet thoughts and a moderator of passions. It is the procurer of contentedness ... A world of other rich blessings attend upon it" ..

Among the Moderns

... "and so it goes . . . The same routine . . . This life kills me . . .
At least there is the ocean, the sands and sunsets. I must be off . . . I leave."
—Alexander, Grand Duke of Russia.

Not only was fishing the earliest of man's escapes from boredom, anxiety, and worry, but it has remained his favorite in modern times. It had its influence on the World War. On August 1, 1914, when England was forced to declare war on Germany, VISCOUNT GREY of Falloden (Sir Edward Grey, 1862-1933, the statesman who was Britain's liberal Secretary of State for Foreign Affairs from 1905 to 1916) was looked upon by the British Empire to advise it. The most important day in all history! Wishing to contemplate the effect of the catastrophe upon our own civilization, Sir Edward ordered his tackle packed. Immediately, he was off—to fish and think! While thus undisturbed he determined England's part in the historic events that were igniting the world's powder barrel.

Later, partially blinded from the arduous duties of his office, he writes with that sincerity of purpose, softness of manner and charming appreciation of the devout fisherman in his *Retrospect*:

"Now on one, now on another scene an angler's mind dwells as he thinks of fishing. For, indeed, it does seem a separate world—a world full of beauty and enjoyment . . .

"The time must come to all of us who live long when memory is more than prospect. An angler who has reached this stage and reviews the pleasure of life will be grateful and glad that he has been an angler. He looks back upon days radiant with happiness, peaks of enjoyment that are lit in memory by the light of a setting sun."

But it is in modern America that the *Grand Fishing Fraternity* has come into its own. It is estimated that in the United States there are no less than 10 millions who enjoy fishing. Probably, it is our inherited birthright: when the Pilgrims asked King James for their charter they explained they wanted to go to the New World to "worship God and catch fish".

The Father, and first President of the United States, General GEORGE WASHINGTON, was renowned for his fishing activities. "He gave wise counsel on bait and fishing tackle". (Mentioned in the *Literary Digest*, Sept. 1, 1934, pp-35.)

DANIEL WEBSTER (1782-1852), American aristocratic Whig of the Old School, statesman, lawyer, orator, lover of high-life, writer and man-of-accomplishments, "whose mind seized the essence of things", was a true lover of fishing. He commenced

it in early boyhood and continued throughout his long and interesting career.

The outline of his famous address on the anniversary of the Battle of Bunker Hill was drafted while he was fishing. His other orations are referred to as being "portrayed with a dignity and amplitude which good judgment considers worthy to be compared with Demosthenes and Burke", and that "eloquence never reached a greater height."

"The fishing disease is my most powerful affliction", admitted GROVER CLEVELAND (1837-1908). He became President of the United States at the comparatively young age of 47. Here is an extract from his famous "Hunting & Fishing Sketches", referred to as a minor classic¹:

"Fish constantly do the most mysterious and startling things. No one has yet been wise enough to explain their ways, or to account for their conduct. In these circumstances they lead fishermen to see and do wonderful things

"If those who are not members of the Brotherhood of Fishermen are unable to assimilate the enthusiastic recital of these wonders, it is merely because their believing apparatus has not been properly regulated and stimulated. Such disability falls short of justifying doubt as to the truth of the narrations. The things mentioned have been seen: they have been experienced with a fisherman's eyes and perception. This is perfectly understood by listening brother fishermen. To their joy and edification they are permitted to properly adjust their mental equipment to believe what they hear."

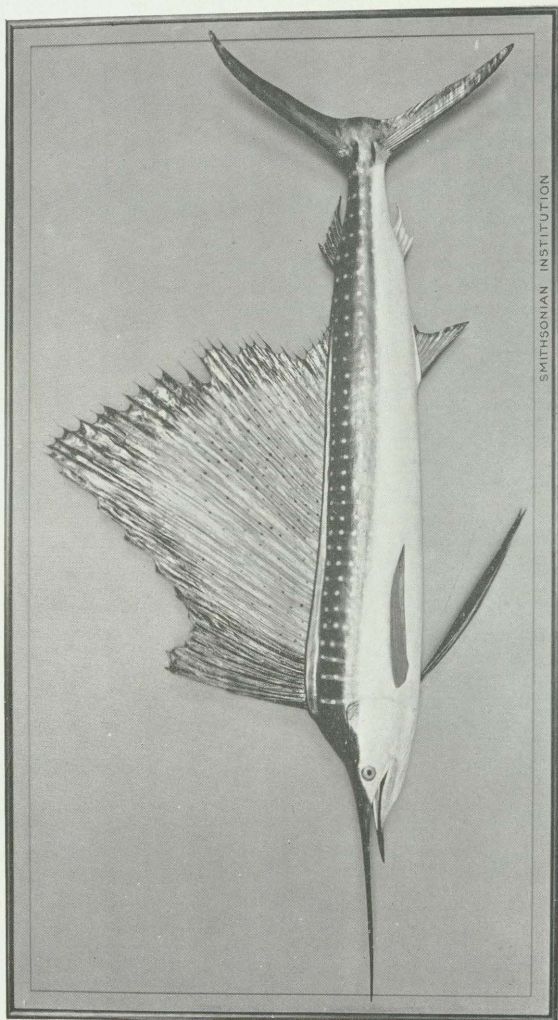
Our Debt to Anglers

And it is likewise true in our time that this great assemblage of sportsmen bear their part in the powerful, unassembled congress of the world. Are they not always informally in session when on fishing ventures? Isn't angling a passion, therefore, too little practiced in our day?

It is significant that Honorable HERBERT HOOVER (1874—) when relieved of the weighty cares of state as thirty-first President promptly indulged in his passion—deep-sea fishing.

Similarly, Honorable FRANKLIN D. ROOSEVELT, humanitarian and exponent of the "New Deal", just prior to undertaking the record-breaking responsibilities of his great career, followed the example set by our illustrious *Past-Masters*: he, too, hied to the

¹By special permission of his widow, Mrs. Thomas J. Preston.



SMITHSONIAN INSTITUTION

PRESIDENT FRANKLIN D. ROOSEVELT, to temporarily escape the boundless responsibilities of his great office, follows the example of our illustrious Past-Masters: he, too, lies to restful contemplation afforded by oceanic angling jaunts.

Near Cocos Island (off the Pacific Coast of Costa Rica) on October 11, 1935, the humanitarian's thoughts on the high principles of right and justice were rudely interrupted . . . From the marlinorama emerged, phantom-like, the 134-lb., 9-ft. 8-in. *Istiophorus orientalis*, above pictured (which species grows considerably larger than the Florida sailfish) . . . hurled its pointed, speared-blade at the meagre enticement . . . slung itself skyward, whirled and heaved with terrible squirming motions like convulsions, alternately submerging for long moments.

His mission for the sport aroused, the President accepted the gleamy-eyed hydromaniac's challenge and fought back, relentlessly, ending the aquatic skirmish two unyielding hours later. The memento-evidence was sent by the "New Dealer for Fishermen" to the Smithsonian Institution (U. S. National Museum), Washington, D. C.

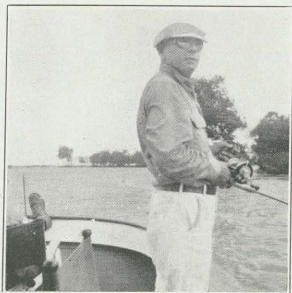
Gulf Stream, off Florida, the author's favorite fishing waters, to fish.

Later, after about a year in high-office, this thirty-second president, suffering the effects of his first veto in Congress turned again to deep-sea angling to recuperate his mental powers.

In every period, land and clime may be found biographs of enduring accomplishments of our noble *Past-Masters*. Scholars all! Each was a devout fisherman! Willingly succumbing to the absorbing passion for the sport, it enabled them to reveal the beautiful principles of right and justice. They became distinguished intellects on life's stage as well as in the *Grand Fishing Fraternity*. They found insight into the mysteries of logic, physics, astronomy, biology, education, sociology, government and political science,—all the high, humane endeavors. They fed the multitudes proper and noble thoughts, caused men to think.

For hundreds of years anglers have given the world truth and philosophy. Fishing has been the principal means of bringing men closer to each other and closer to genuine happiness. It has led the way to restful contemplation.

By those indulging in this favorite recreation, public wrongs were first declared, first corrective measures reasoned out, and the course of public opinion shaped. They likewise taught us how to escape the burdens of the struggle for existence; how to travel the route to leisure, reflection, and the art of living. From them we learn that the difference between wise and unwise men is simply this: the first is acquainted with regions invisible to the second—away from common sights and endeavors. The first sees *and understands* things. The other only sees them. This is one of the rewards of this novel and fascinating interest. It cleans and purifies; its indulgence makes wholesome minds and bodies. Whether it be in the fishing act itself, or merely in cheerful discourse, or a disconnected mental journey (such as this writing), angling expeditions are full of fanciful repose of mind.



Whether one enjoys international renown, or is simply a sitter-by-his-home-town-creek, fishing provides a stimulation to the body and a benediction to the soul . . .

Fishing, therefore, is a stimulation to the body and a benediction to the soul, whether one enjoys international renown, or is simply a sitter-by-his-home-town-creek. Each of our fraternity follows the example of these shining lights of ancient and present-day culture who put the *Grand Fishing Fraternity* on its sublime bas's!

Fish Epicures: The Real Culprits

"He was a man of unbounded stomach".—Henry the Eighth, 4:1

Fishes and fishing endeavors, past and present, do not affect all individuals alike. Some, we find, have been content to enjoy fish-flesh without indulging in the angling process prior to their consumption of this nutritious food. These are the real villains.

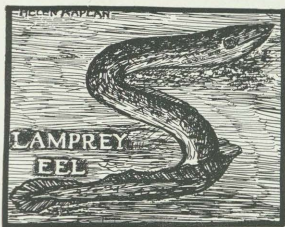
From most primitive records it is known that fishes were a principal article of diet. It calls to mind the realistic remark offered by an unknown wit: "Fishes are created to swim three times: in its native element, in butter sauce, and in my vitals." And so it is that fishes formed the principal foods when royal delicacies were desired at feasts long years ago. In truth the fish weighed heavily upon both table and stomach.

Three instances from Roman lore compel attention. They are cited here to support this truth:

TITUS FLAVIUS DOMITIANUS (51-96 A. D.): Emperor Domitian devoted his early life to literary pursuits and pleasures. Then he succeeded to the throne of Rome. Because of his high-handed treatment of his subjects and the Roman Senate, he earned the name, "Tyrant". No evidence is found to prove that he was a fisherman. This probably accounts for his repulsive disposition.

Plenty is written, however, in support of the fact that Domitianus was an incorrigible fish-epicure.

In fact, during one of his insane moods he ordered a special sitting of the entire Roman Senate to deliberate and advise him upon a matter of such grave importance as to the best method of cooking a fish. Evidently, his lack of indulgence in the pastime of angling caused him to run amuck.



POLLIO GAIVS ASINIUS (76 B.C.—5 A.D.): This orator, poet and historian lived during the reign of the Caesars, when high Romans vied one with another in furnishing the most delightful foods to their guests.

The vacuum-mouthed eel, known as a lamprey, was a marine creature of special food-preference. Wealthy statesmen and generals paid as high as 100 gold pieces for this species, keeping it in especially constructed pools. This made it possible to serve a lamprey whenever desired.

Pollio, a friend of Augustus Caesar, conceived the idea that these snake-like fishes were exceptionally palatable when fed human flesh before their consumption. Accordingly, when one of his slaves was accused of a slight fault, Pollio had him thrown alive into his lamprey-pond. No other food was given his eels.

To the credit of Augustus Caesar let it be known that he, upon learning of this horrible practice, ordered all the lamprey ponds in Rome filled.

The two epicures mentioned are outranked, however, by one who preceeded them. MARCUS GABIVS APICVS (14 A. D.-37) is far more worthy of the fanatical crown. He had a short life but a merry one.

Young, wealthy, fired with the intense ambition of his abnormal taste, Marcus Gabius made history in his own peculiar way. A half-million sterling (about 2½ million dollars—a tidy sum even for our own generation) was squandered by Marcus' indulging his insatiable desire for creating new and savory dishes and rare flavors. But there was no satisfying this Ro-

man's artistic perception of the "best in foods". He bade his lieutenants search every known part of Europe, Asia and Africa as well as the surrounding seas for exquisite *ichthyophagy* (something to eat). For his peculiar palate he had their findings concocted into choice combinations of appetizing dishes. Still his abnormal craving for food was unsatisfied.

One day, however, our eccentric young host was able to balance the account. Finding that he had but 80,000 sterling (approximately \$400,000) remaining of his once vast fortune, Marcus Gabius despaired, lest he might be unable to satisfy his greatest desire. From this, to him, miserable residue he decreed his last sublime act in the scientific interest of the art of nutritive materials:

He ordered the most sumptuous feast ever known to be arranged. Rome had participated in wonderful celebrations but this must eclipse all previous ones; it must be the most sumptuous his legions could devise. Under pain of horrible torture and even death, his emissary-scouts and legions labored overtime to secure and prepare the necessary ingredients. Thousands upon thousands of chefs toiled day and night, for many moons, in their artistic culinary preparations.

At last it was done! The choice morsels were rarest *pisces* from far-away seas. These were made the principal dishes, to be served abundantly and elaborately.

For several days Gabius fasted. Without victuals or drink his extraordinary appetite became thoroughly whetted, as may be imagined. Then when his belly-god signaled "ready" he directed that the feast begin. Marcus stuffed his stomach to its utmost capacity, until his vitals answered "glutted." Then, in good cheer he arose. To the assembled multitude of guests he proclaimed that on this happy occasion his "life's ruling ambition had at last been attained." Thereupon he commanded everyone to be silent. He must perform what he considered his solemn duty and a heroic act!

At the tender age of twenty-and-three, after briefly explaining that his future years might bring him unhappiness and attendant misery, since, as he explained, there was nothing else for which to survive, Marcus Gabius Apicus promptly poisoned himself. He died immediately.

From this episode we get our word *appetite*! Fish-flesh indeed!

Anglers' Dogma

But to return to our true anglers—has it not become obvious that our primary trouble in these tense times is the improper use of the brief span allotted us on this planet? Your response, I take it, is in the affirmative. Our great need is for a complete change of endeavor and environment.

Then, shift your attention!

You, who, have suffered from the continued shocks of vexing, vocational pursuits! *You*, languid, unstrung fellow! *You*, who must always be rushing, falling, picking yourself up and running again—only to fall harder in trade's congested traffic! *You*, whose life is speeded up to the breaking point! Especially *You*, who live a hundred months in as many days! And *You*, whose withered vitality is being ground to dust and buried within your body long ere your bones are interred!

Come with me! Relieve yourself of life's strain and stress. Throw off the yoke of humdrum, everyday monotony. Leave behind professional duty, commercial speculation, financial uncertainty, disturbance, exasperation, mental and physical anguish in various forms, shapes and conditions. Leave the remainder of mankind—working itself into a frenzied state in the exchange of money and commodities.

Come! We will rebuild our tottering, mortal structures—restore our wrecked nerve-systems to normal functioning—before our physical sensibilities give up, hopelessly, the unbalanced struggle.

We will follow the beneficial example of our exalted Angling Past-Masters: *We will go fishing!*

This is the most fascinating and effective means known for removing one's self completely from the nausea of discomforting pursuits. It is the approved method of loosening the tension and slackening the pace. In obedience to the Angling Code the tools of commerce are dispensed with while we voyage to and enjoy delightful places.

Performing angling rites is essentially a labor of love. It fills its followers with the divine quality of contagious enthusiasm. No other passion becomes so deeply ingrained or enchanting; once acquired, it acts upon its addicts like a powerful stimulant.

Marvel, you uninitiated, at the nicety of the angler's perfect adjustment to the simple life he leads while enjoying himself and improving his human sensibilities.

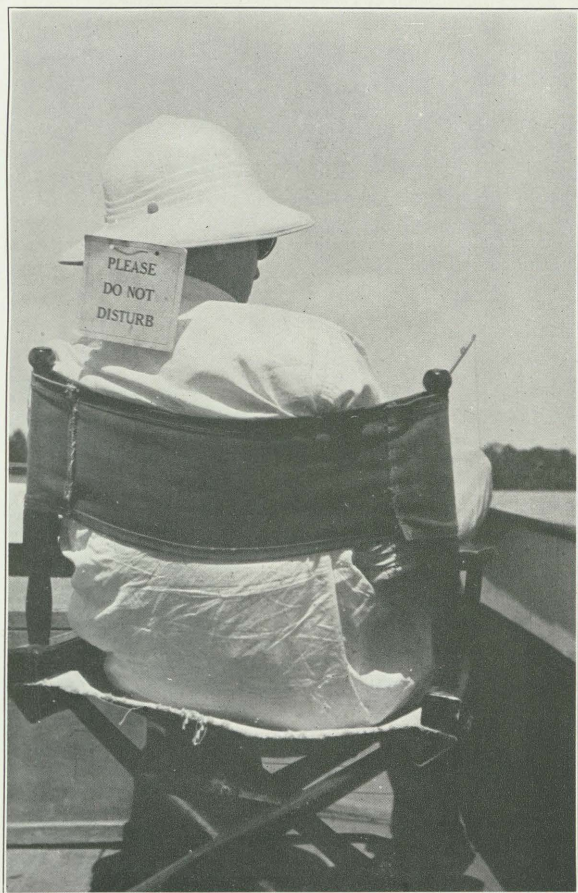
Our ultimate mission is deep-sea fishing. But there are sights to be seen which will enchant us as much as our intended aspirations.

Ride leisurely with me. En route I hand you the secret key of our extraordinary fraternity. It unlocks the invisible portals of the glorious settings of nature's fantastic and magnificent works—unchanged by the hand or act of man. It enables us to make direct contact with the infinite works of the Deity as, with light and agreeable thoughts, we are being delivered at FISHERMAN'S PARADISE.

In sharp contrast to our former strenuous existence, new inspiration and outlook will be ours. This absence is the ideal investment. It will pay us life-long dividends in balanced nerves and robust health. Our time and activity will be expended in securing much needed rest and relaxation. While our mentalities and physical make-ups are relieved, our memories will be stored with melodious and happy impressions.

You are now becoming initiated into that sublime degree of Ancient Brotherhood of Fishermen—the *Grand Fishing Fraternity*. Its lofty precepts and inspiring traditions are more honorable, and its benefits more widely conferred to deserving individuals, than any order of priest or monarch. Its rules of conduct are based upon sound psychological and philosophical rites. The ceremonial is simplicity itself; it is void of symbolism and ornamentation. There are no aggravating "don'ts" to be observed. We are without care or concern!

During reflective periods we meditate upon the mystery of life. Useful truths come to pay us visit. As we become attuned to the peaceful surroundings, the very atmosphere seems charged with something vitalizing and refreshing. The interval of our diverting excursion is as though we are snatched up by a magic carpet and transported on the fairy wings of adventure. SALUS, Roman Goddess of Health, Prosperity and Public Welfare, is our constant companion. We travel to the sanctified harbor of sanguine expectations.



Heave a deep sigh of relief! The world and its problems are forgotten. We have thrown off the yoke of worry and business madness, so destructive to life's vital energy.

The Road to Contentment

As *Dean of Fishing* it now becomes my duty to acquaint you with our modest and wholesome edicts. Thus emotionally and temperamentally situated, in perfect ease and simple luxury, the surface of our mind's sluggish pool is unstirred and unruffled. You are being lifted to a heavenly degree of existence. You are about to attain that sublime and elusive object of human ambition to which all aspire, but few achieve—*Contentment!*



Through the following doctrines, well and faithfully observed and frequently practiced, is thine ascendancy to high membership in our GRAND FISHING FRATERNITY possible. Only by these logical PRINCIPIUM are the special privileges and advantages of this time-honored, grandiose indulgence available to thee:

PRINCIPIUM

(1) **LEAVE BEHIND THEE** the binding chains of external circumstances—the burdens, bitterness, harshness and strife of complex civilization.

—Turn ye away from noisy thoroughfares, shadows and canyons of offices, stores, factories, transport-mediums and all other artificial, man-made contrivances and functions, with attendant fatigue and depressing continuity of service. Become relieved of duties which have worn heavily upon thy brow.

(2) **RETREAT THOU** to the great *Al Fresco*.

Allow the sparkling sunshine and glorious outdoors to completely embrace and possess thy mind and body. Associate intimately with **NATURE**, the Master Rejuvenator of Men's Spirits, and become cleaned by the pure, fresh air of exultation.

(3) **GO FISHING!** In performing its rites travel the paths of blessed doctrines handed down by our noble Past-Masters who (as the result of angling endeavor) became the world's greatest thinkers, writers, reformers, statesmen, scientists, and historians.

(4) **SPEND DAYS DELIGHTFULLY** exercising the inviolate passion for this alluring diversion! Perform its functions with unbridled passion for the unbounded pleasure, amusement and wholesome benefits it affords; not as a matter of hard necessity.

(5) **FERTILIZE THINE IMAGINATION!** Qualify thyself for the fullest measure of enjoyment from the beauty and invigorating effect of the rare grace and charm of the Supreme Architect's scenes to which thou art privileged to bear witness.

(6) **AND WHEN IN EACH OF THESE** thou art well and duly qualified, life's most elusive blessings—**PEACE, PATIENCE AND CALM CONTENT**—will co-habit thy cheerful heart and rested physical-being. This is the celestial tonic and God-given remedy for improving and lengthening human life.



CHAPTER TWO

Itinerary

"These, my honest scholar, are observations of which you may make some use".—Izaak Walton, The Compleat Angler.

*FLORIDA'S EAST COAST—Archipelago—Keys—Key West
—Record Gamefishes of Florida and Bimini Waters.*

*GOLD COAST—Pillagers—Gulf Stream—Beneficent Sunshine
—Real Estate Transactions.*

*THE EVERGLADES—Ten Thousand Islands—Tidal Estuaries—
River Channels—Fish Food—Fishermen's Paradise—
Insects.*

*INVADING THE TEN THOUSAND ISLANDS—Exposed
Water and Sky—Contemplation.*

LOPEZ, GUIDE—Companions.



IF WE were planning to take a vacation journey we should want to know, in advance, among other things:

- (1) What places we were going to visit, and their relative locations;
- (2) Some of the past and present history of these places;
- (3) The customs of the various inhabitants;
- (4) The special objects of interest to be seen at each point;
- (5) What arrangements are available for competent guides, and the best methods of observation.

By doing so we become equipped with new vision. Our horizon is broadened. Our imagination and enthusiasm can be given full play. A more complete basis is afforded for appreciation, fascination and enjoyment of Nature's almost limitless shapes, colors, textures and life activity. In short, our trip would thereby be more successful.

Similarly, to get the maximum pleasure and recreation from our deep sea fishing venture, we want advance knowledge of the territory and the waters in which we are to fish, in order to understand how and why particular locations we will visit vary from the ordinary. Likewise, we should know the kinds of game fishes we seek, their habitat, build, characteristics, peculiarities and the special parts these aquatic actors play in their enchanted realm. Only when we can *intelligently* observe the hundreds of brilliantly beautiful oceanic creatures and other undersea marvels does our understanding become alive with interest.

*FLORIDA'S EAST COAST*¹

THE Florida peninsula has a rich background of more than four centuries of colorful, romantic and adventurous history since the white man's appearance. Explorers, settlers and soldiers from Spain, France and England left their imprints.

A little more than 93 per cent of the state's total 58,666 square miles is land surface. The remainder, less than 7 per cent, is water. It is said by Lieut. Colonel Gilbert A. Youngberg, U. S. Army District Engineer for the Florida peninsula, to have a tidal shore line of 1277 miles. Nearly one thousand miles of additional coastline would be added if that of the islands were included. Approximately five hundred miles of this tremendous coastline extends on the Atlantic ocean from the state's northern to its southern extremity. This is referred to as the East Coast. The balance is along the keys, Florida Bay, and the Gulf of Mexico on the south and west. The average breadth from east to west is about 100 miles; the maximum width is 350 miles.

An auto trip made leisurely down the East Coast (which comprises about forty per cent of the entire coastal borders) must be made in order to be fully appreciated. From Jacksonville south to Miami (*Mayaimi*, meaning big lake, from the Calusa Indian term), built on the site of the old Fort Dallas, established in 1836—shown on one old map as "Rio Ratones" or "river of rats"—is a distance of 365 miles. Key West is 175 miles farther south. For several hundred miles the scenery is a vast masterpiece of the inimitable sculptor, Time. After the first view of it one is caught by the magical charm of this marvelously beautiful realm.

ARCHIPELAGO—As we approach Palm Beach County² the coastal scenery becomes even more interesting. This is

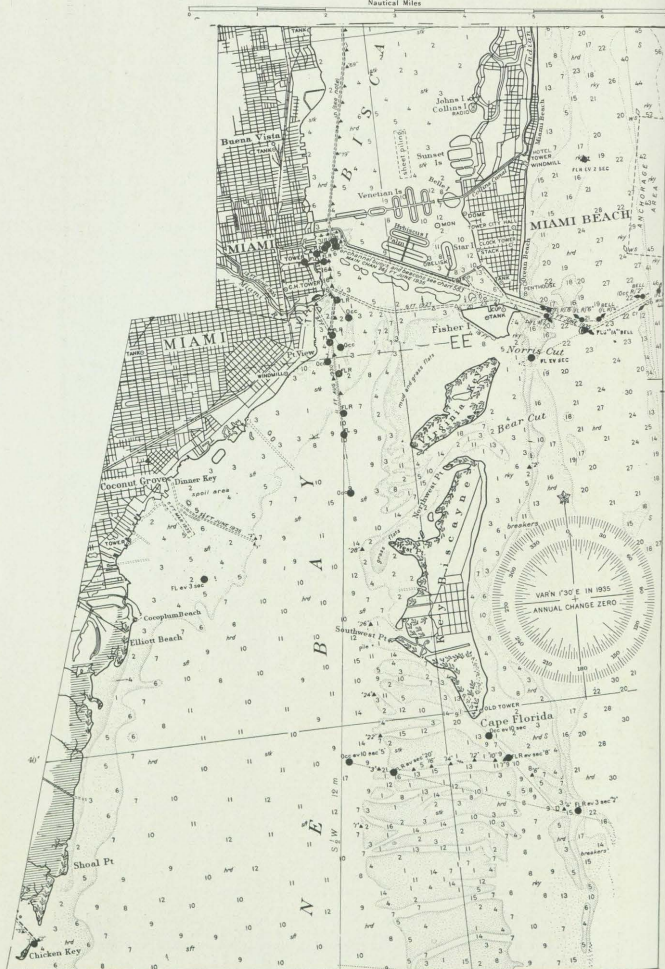
¹JUAN PONCE DE LEON (1460—1521) accompanied Christopher Columbus on the latter's second voyage to America. He "rediscovered" Florida on April 8, 1513. Because it was "Easter" Sunday he named it "Florida" (from the Spanish *pascua florida*—feast of flowers). In that year he followed a large part of the coastline in his continuous search for the mythical Fountain of Youth. He did not know that the real "fountain of youth" is contained within our own bodies. On his subsequent explorations of Florida, made in search of wealth, he charted the coast. While on this mission, in 1521, he was mortally wounded by an Indian's arrow and was carried to Havana, dying in the same year.

²PALM BEACH—The Spanish brig "Providencia" was wrecked and its cargo of coconuts washed up on the nearby beach; these sprouted or were planted by early settlers. The resultant coconut palms gave the designation to the vicinity.

BIG GAME FISHERMEN'S PARADISE

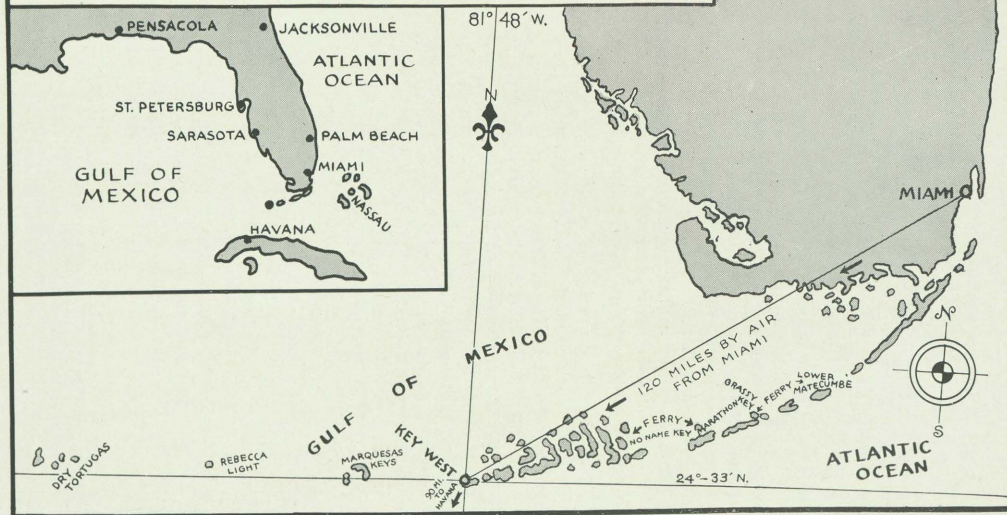
SOUNDINGS IN FEET
AT MEAN LOW WATER

Nautical Miles



Courtesy U. S. C. & G. S.
Not for navigation.

THE LOWER FLORIDA KEYS



especially true of the seventy-five miles of highway along the "Gold Coast" into Miami. Here, at the Miami Municipal docks, the Floridan and Chamber of Commerce docks of Miami Beach are found the world's finest and largest sport fishermen's fleets, an assembly of exquisitely equipped yachts. These are for charter to visiting anglers on their deep-sea ventures.

KEYS¹—Below Miami, fronting the sea in the southernmost part of the "sunshine peninsula", and extending like stepping stones in a curved line southwest, is an almost unbroken, continuous chain of mangrove and coral islands. These form an archipelago or barrier reef. They may be compared to the main spinal column with its branches in the human body—on a tremendous scale—for a distance of some 200 miles below Miami Beach. Thousands, perhaps millions of years were required for them to form and become exposed.

These are a continuation of much larger, somewhat similar formations which commence farther north along the East Coast separating broad bodies of water from the ocean. Examples are Mantanzas Bay at St. Augustine, Halifax River at Daytona, the Indian River, along which for miles upon miles are great citrus fruit groves, making this one of America's most attractive highways; Lake Worth, which divides fashionable Palm Beach from its mainland, commercial, sister city, West Palm Beach; Biscayne Bay at, and Florida Bay below Miami. Along many parts of the East Coast these inhabited islands are called beaches, such as Flagler Beach, Ormond Beach, Daytona Beach, Cocoa Beach, Melbourne Beach, Palm Beach, Delray Beach, Miami Beach, etc.

South of Miami the largest is Key Largo, a 30-mile long and 1-mile wide island. Long Key, lying at the ocean's edge about midway between Miami and Key West (see charts) was for many years a world famous fishing camp until destroyed by the hurricane on September 2, 1935. Pirates Cove Fishing Camp, in the Pine Islands, approximately 125 miles from Miami is 25 miles north of Key West. A new fishing camp

¹KEY (or CAY) is the Anglo-Saxon corruption of the Spanish "los cayos", which means "little islands". Some keys retain their original Spanish designation, e. g., Key Largo ("long key"); Tavernier; Islamorada; Matecumbe ("bent bushes"); Bahia Honda, Sombrero Reef; Boca Chita; Marquesas (probably from some marques marooned there by pirates, or perhaps a ship by that name wrecked in the vicinity—its true derivation is hidden in mystery); Tortugas (described in the next chapter); and others, all these being between Miami and the Dry Tortugas island group.

has just been erected $6\frac{1}{2}$ miles north of Key West on Boca Chita Key by Luther Pindar.

The remaining keys are hardly large enough to justify their being called islands. They are mostly small or narrow and odd-shaped or rounded mangrove-covered spots which rise but a few feet above the water's surface. Many are bars composed of fine, soft, calcereous sand, situated in and around the plentiful estuaries, lagoons, bays, lakes, swamps, inlets, channels and rivers of the archipelago. At high tide these little keys become almost submerged, being only a few feet above sea level, although in a few places they rise slightly higher. The combined lot of the keys south of Miami hardly exceeds 50 square miles total "exposed" area. From the air these marvels of tropical formation have the appearance of numerous "emerald isles dropped into a turquoise sea."

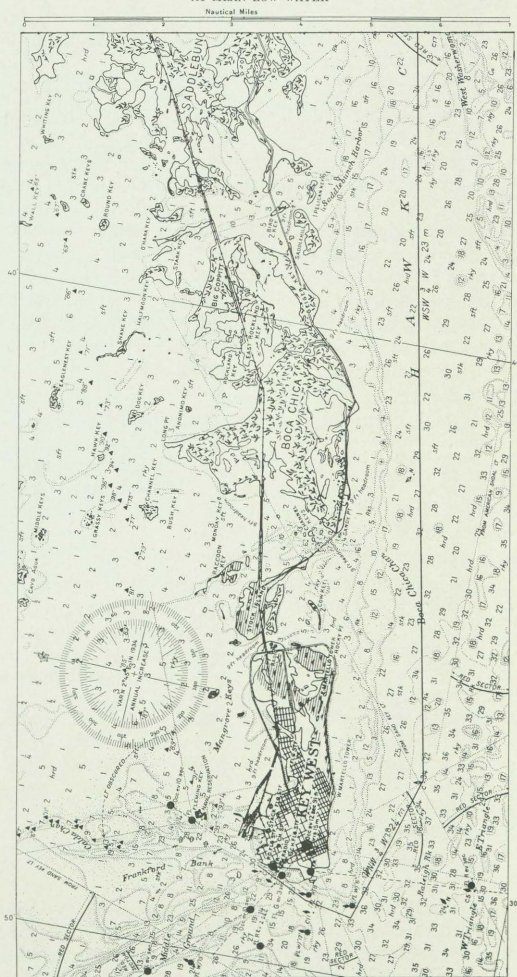
Hardly any two of the keys are alike. They take on a variety of shapes and sizes. The majority are covered with patches of mangrove bushes or trees, rounded and sloping,—an effect produced by the spreading of the trees in all directions, the oldest being in the center and the smallest (youngest) on the outer edges. Some tracts cover hundreds of acres as they branch out and scatter in the watery landscape. For example, Florida Bay is interspersed with these growths.

The keys' formations have been divided into two groups by Professor John C. Gifford, D. OEc., of the University of Miami. The upper keys (north of Bahia Honda) consist of coral reef limestone; the lower group (around Key West) are composed of oolitic limestone, like that of the mainland, or eggstone, white and soft, consisting of many little round balls of lime cemented together. The coral reef limestone is hard, dark in color, varied, with coral masses in between with other kinds of lime deposits. The oolite was blown or washed in by wind and wave.

Sea gardens are plentiful in the coral reefs. Marine life and activity can be clearly and interestingly observed. Because of their exquisite beauty, brilliance of coloring and the water's clearness, these are added attractions to the thousands of anglers who come here.

To us as salt water anglers the keys are of primary interest. They afford excellent shelter and an abundance of food for the game fishes we seek; hence thousands of all kinds make this region their habitat.

BIG GAME FISHERMEN'S PARADISE

SOUNDINGS IN FEET
AT MEAN LOW WATERCourtesy U. S. C. & G. S.
Not for navigation.

Others are merely small, rounded or narrow, odd-shaped mangrove covered keys, which become almost submerged at high tide. They are situated principally around the plentiful estuaries, lagoons, rivers, bays, lakes, swamps and channels. *This type of habitat affords excellent shelter for the many species of food and game fishes we seek.*

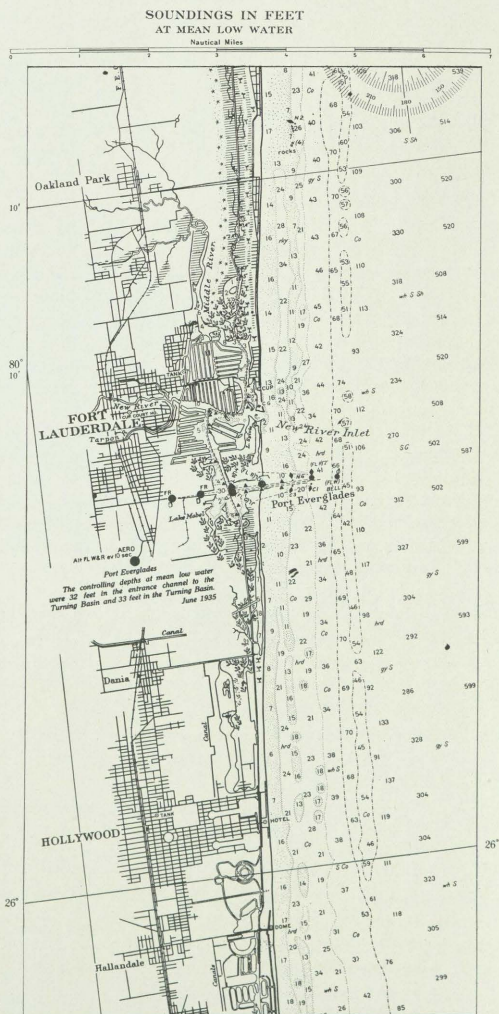
KEY WEST—This narrow-shaped, three-mile-long and one-or-two-mile-wide island, the highest point of which is about ten feet above sea level, was settled in 1821. It sits at the bottom of the Florida archipelago, 125 miles off the mainland. Originally it was known as "Cayo de huesos", or reef of the bones, because of numerous skeletons found on its wave-washed beaches. Some authorities say that it was so named by pirates who infested it; sea-robbers found this an advantageous lair for pouncing upon merchant ships and vessels plying to and from ports of Central America and the Gulf of Mexico, without the aid of modern charts to guide them through the treacherous shoals and reefs along the Straits. After the buccaneering and pirating hordes were driven out (by Commodore Porter, U. S. Navy), salvaging wrecked ships became quite an industry. Many Key-Westians became wealthy thereby. Picturesquely quaint houses, constructed of solid mahogany taken from these wrecked ships, still adorn many streets of the island city.

Later the island became known as Key West. After the Civil War its population was doubled by an influx of fifteen-thousand Cubans who came over and established the cigar industry. Before these factories moved to Tampa the cigars of Key West were known the world over.

A colony of Greeks, using about one hundred and fifty vessels in their trade, made this the center of their sponging industry. They, too, moved away.

Again the distant key sprang into prominence when the "Maine" was blown up in Havana harbor. It was used as a port of embarkation during the Spanish-American war (1898). The United States Navy maintained a base on the island, but later abandoned it.

For a time this was a forgotten isle. Then, once more, new life was injected into it by the late Henry Morrison Flagler (Jan. 2, 1830—May 20, 1913), who had pushed his Florida East Coast railroad down through the tropical wilderness to Miami, April 15, 1896. For several years, until 1903, Miami



Courtesy U. S. C. & G. S.
Not for navigation.

was the southern terminus. In 1907, without a precedent to follow, Flagler launched his project which resulted in the erection on concrete stilts of the "Overseas Extension", connecting forty-one keys,—the longest ocean causeway.

"The daring work was accomplished in the face of immense obstacles. Often nature itself, angered at being shackled, destroyed miles of newly created causeways and embankments on the keys; torrents lashed against huge concrete and steel bridges" . . .

In spite of the greatest handicaps imaginable, seven years later, on Jan. 22, 1912, the eighty-two old "Empire Builder" triumphantly rode the first train across this 125 mile engineering miracle which came to an abrupt end at Key West, confessing its inability to compete further with its ancient rival, ocean transportation. Ferries operated from Key West to the isle of Cuba—90 miles south—transporting human and merchandise cargoes across the swirling, open-water, perilous straits in six hours. (Now, only two hours are required by air travel from Miami to Havana, eliminating Key West.)

(A new link between the railroads of the United States and Cuba has recently been created at Port Everglades, at Fort Lauderdale, 25 miles north of Miami. As recommended by the U. S. National Rivers and Harbors Committee, in order to make Port Everglades a world port of call, a Federal appropriation of \$1,134,000.00 was made for widening the channel and enlarging the turning basin.)

Commercial fishing always has been one of the island's principal sources of revenue. Tons upon tons of fish are taken from the surrounding waters, the average annual fish export from the vicinity amounting to about four million pounds.

The successive losses of its varied sources of income over the decades has left the island population practically stranded. By 1920 the island population had dwindled to 18,750. Efforts to revive it were begun by the "New Dealers", in 1934 so that some means could be devised for the remaining 12,000 inhabitants to earn a living. Hardly had this work been inaugurated, however, when a new and fatal blow was dealt the community: on September 2, 1935, a hurricane, of unprecedented intensity, destroyed more than forty miles of road beds and railroad trestles, the damage running into millions of dollars. This necessitated indefinite suspension of train services across the keys. Because this connecting railroad link between civilization and the southernmost city in the United States has never been

profitable, and may not be rebuilt, it causes a new threat to the key population's existence. The highway, however, across the keys has been rebuilt. The author was able to make an automobile trip in comfort from Miami to Key West the last of December, 1935, except for the six-hour, fifty-mile voyage by ferry from Upper Matecumbe Key to No Name Key. New ferries, to be placed in service immediately by the Federal Emergency Relief Administration will lessen the time by ferry one-half over this stretch. A Federal loan is being negotiated to continue the highway over this part.

The Florida key archipelago separates the mainland from the Gulf Stream. This great current flows along the Atlantic ocean's edge on the lower side of the keys. The almost unbroken reef continues to Marquesas keys—several little, low islands, about thirty miles west of Key West, surrounding a lagoon, like an atoll. Then the island formations almost stop.



GALE SWEPT MARQUESAS KEYS

The quite large group is half-moon shaped, the "jumping off place" after leaving Key West for Dry Tortugas, over rough and treacherous straits. About forty miles due west of Marquesas is tragic Fort Jefferson.

The next stretch, is taken up with deep, open, untrustworthy water—the straits¹—for approximately thirty miles. S. W. of the Marquesas keys is "No Man's Land", so termed because of its inaccessibility, as well as the extreme difficulty of exactly locating it. At certain times during the winter months the world's greatest assembly of kingfishes may be found in this place.

In effect, the Atlantic ocean, the Gulf of Mexico, the Gulf Stream and the Florida straits join in this proximity. This mixture is repeatedly whipped into a frenzy by powerful trade winds, which are constantly in attendance. The result is gale-swept waters, undercurrents of terrific force, constantly shifting quicksands,—all uncertain and treacherous conditions.

¹STRAITS are coastal waters separating the southeastern mainland of Florida from the keys, and from the Bahamas and Cuba. The straits are three hundred miles long and sixty to one hundred miles wide. The main channel, through which the Gulf Stream flows, is 3,000 to 5,000 feet deep. The eastern half includes the waters of the Great Bahama bank.

RECORD GAMEFISH CAUGHT ON ROD AND REEL IN FLORIDA AND BIMINI WATERS

*Worlds record

Species	WT. lbs.	Caught Off	Month Year	ANGLER
*AMBERJACK (<i>seriola lalandi</i>)	95	Long Key	1916	S. W. Eccles
*BARRACUDA Great (<i>sphyraena barracuda</i>)	64 1/4	Miami Beach	April 1924	A. H. Peterson
*BONEFISH (<i>albulu vulpes</i>)	13 3/4	Bimini	Mar. 1919	B. F. Peek
*BONITO (<i>gymnosarda allerata</i>)	20	Hollywood	April 1936	Alice Ijams
CHANNEL BASS (Redfish) (<i>sciaenops ocellatus</i>)	41	Fort Myers Redfish Point	Feb. 1935	-----
*COBIA (Crab Eater) (<i>rachycentron canadus</i>)	82	Long Key	1930	E. P. Coles
*DOLPHIN (<i>coryphaena hippurus</i>)	55 1/4	Miami Beach	1935	N. W. Fort, Jr.
*JACK (Cravalle) (<i>caranx hippos</i>)	42	10,000 Islands Oyster Bay	June 1931	Moise Kaplan
*JEW FISH (<i>promicropus itaiara</i>)	750	Miami Beach Bakers Haulover	1925	Richard Tallman
*KINGFISH (Cero) (<i>scomberomorus cavalla</i>)	73 1/2	Bimini	Mar. 1935	L. B. Harrison
MARLIN *Blue-black (<i>makaira nigricans</i>)	636	Bimini	June 1935	Thos. Shevlin
*White (<i>makaira albidia</i>)	152	Bimini	Mar. 1935	Marion B. Stevens
MAKO-SHARK (<i>lamna</i>)	1000	St. Petersburg	Mar. 1936	Al Hack
*ROBALO (Snook) (<i>centropomus undecimalis</i>)	49 1/2	10,000 Islands Marco	June 1926	L. S. Caine
*SAILFISH (Atlantic) (<i>istiophorus americanus</i>) Largest, 2 anglers Largest, 1 angler Smallest	119 106 2-lb.	Key West Miami Beach Miami Beach	Mar. 1934 1929 Jan. 1934	E. Hemingway and J. S. McGrath W. A. Bonnell -----
TARPON (<i>tarpon atlanticus</i>) Largest Smallest	213 3-oz.	Bahia Honda Everglades Canal Palm Beach	1916 Nov. 1935 Mar. 1935	N. M. George G. H. Gleason Ralph Walden
TROUT Sea, Speckled (<i>cynoscion nebulosus</i>)	14 1/2			
TUNA Giant, Bluefin (<i>thunnus thynnus</i>)	542	Bimini	June 1935	S. K. Farrington, Jr.
*Allison (<i>neothunnus allisoni</i>)	170	Miami Beach	Feb. 1936	Dan Stebbins
*WAHOO (<i>acanthocybium solandri</i>)	78	Key West	1929	T. D. M. Cardeza

These records from Field & Stream and other publications, Bishop & Sims, personal investigation and observation. Compiled April, 1936, by MOISE N. KAPLAN.

A few nautical miles further west, in the midst of this perilous marine waste, is located the Dry Tortugas island group. This, the last of the key formations, differs somewhat from the remainder. It is the end of the United States.

The waters surrounding the chain of keys and the lower Florida coasts contain places visited at nearly all times of the year by zealous sport fishermen. They come from everywhere to indulge in salt-water angling to their heart's content. *This region from the beginning of the "Gold Coast" to the Dry Tortugas Islands is the natural habitat of more than six hundred different varieties of game, food and ornamental fishes.* It has, perhaps, the greatest number, as well as the largest assortment, of sport and edible fishes, including diversity of colors and tints, of any waters.

All this is part of *FISHERMEN'S PARADISE*.

FISHING POINTS IN THE FLORIDA KEYS

(Accompanying map-chart in this publication)

A—amberjack
Ba—barracuda
Bo—bonefish
C—craville jack
G—grouper, large
J—jewfish, large
K—kingfish and mackerel
M—mariposes (small, colored fishes)
P—pompano, African
R—reef varieties (all kinds)
T—tarpon
X—miscellaneous fishes

Nautical Miles S. SW. South End Miami Beach	OFFSHORE NAVIGATION MARKER	(NEAR) POINT OR PLACE	REEF FISHING	COMMENT	GULF STREAM FISHING
↓	Beacon _____ Bn. Flashing Light _____ fl.				
10	WATERS BELOW MIAMI BEACH				
14	Cape Florida fl.	Channels around Brewster, Ledbury and Star reefs	Ba-G-K-X	Rocky Rocks and wreck edge of Long reef	Excellent for all Stream species
20	Fowey Rock fl. Triumph Reef Bn.A				
24	WATERS AROUND KEY LARGO				
27	Ajax Reef Bn.B	Caesar Creek (above) and Broad Creek (below) Old Rhodes Key	A-Ba-G-J-K-R Same—also T in creeks	Large reef X in deep waters; very good lower end of Key Largo	Excellent for all Stream species, espe- cially sailfish
32	Pacific Reef fl.	Turtle Harbor	Ba-G-J-K-R Muttonfish		
37	Turtle Reef Bn.C	Barnes Sound near mainland	T in sound, channels, etc.		
40	Carysfort Reef fl. The Elbow Bn.D	Grecian Shoals; Backwater Sound	Ba-G-K-C-J-P-X	Elbow shallow rocky	
47	WATERS OFF PLANTATION KEY (from TAVERNIER)				
48	Mosquito Bank fl.	Rodriguez Key and Point Charles	Bo—on flats R-X and some C	Hard bottom Same	
53	French Reef Bn.E	Channels around R.R. trestles	R-X	DANGER—treacher- ous breakers	
56	Molasses Reef fl. Pickles Reef Bn.F	Tavernier Creek	Bo on shallow patches T near RR arch; Ba-G-J-X		
60	Conch Reefs Bn.G	R.R. trestles; Tom's Harbor and Hawk Channel	Bo on banks; T in RR channels X and R in channels	Hard coral and rocky bottoms	Excellent NE & SW of Conch Reef
64	FROM UPPER & LOWER MATECUMBE KEYS AND AROUND LONG KEY				
70	Croker Reef Bn.H	Islamorado; Davis Reef	Bo on banks and flats at Barnes, Buchanan and Center keys; variety reef species	Deep channels, cuts and rocky spots; splendid fishing	Very good; excellent for sailfish
79	Alligator Reef fl.	Lignumvitae and Shell Keys	T in Sister Creek, Lignumvitae and Grouper channels		
81	Tennessee Reef (bell) Bn. I	Jewish Key; Trestles No. 2 & No. 5 & Knights Key, etc. viaducts	Every variety of fish	Most excellent	Same
100	Long Key (bell) fl.	West end Long Key trestle			Same
100	BELOW LONG KEY TO KEY VACA				
100	Coffin Patches Bn.J Sombrero Reef fl.	Moser channel; Turtle Shoals Key Caca channel; shoals and cuts around R.R.; Boot Key	M at Coffin patches; T in passes and channels; big amberjacks at Sombrero; Bo on banks and shallows	DANGER — morays and treacherous tides. Rocky bottoms, deep cuts, rough waters	Sailfish off Moser channel. All Gulf Stream species
116	PINE ISLANDS—BOCA CHITA TO KEY WEST & VICINITY				
122	Looe Key Bn.K	Bahia Honda and Pine Key chan- nels, especially Big Pine, Cudjoe, Sugarloaf, Saddlebunch and Boca Chita Keys	T in channels, passes, cuts. All kinds reef fishes, and espe- cially kingfish, amberjack, jewfish, and X.	All varieties of bot- toms; deep cuts and channels; etc.	Very good for sailfish and all Gulf Stream varities
125	American Shoal fl.				
130	Maryland Shoal Bn.L				
133	East Sambo Bn.M				
136	West Sambo Bn.N				
140	Key West channel Bn.O	Same as above	Same as above	Same as above	Same as above
140	Sand Key				

(Compiled by Moise N. Kaplan, Atlanta, April, 1936)

GOLD COAST

SOUTH FLORIDA has other worthy attractions than the coastal formation described.

The stretch of unduplicated shoreline between tropical Palm Beach and Cocanut Grove, south of Miami, is sometimes referred to as the *Gold Coast* for several reasons:

(1) **PILLAGERS**—In the days when piracy was at its height great quantities of Spanish gold (dubloons) and valuable treasures were carried extensively along this much-famed water route. Buccaneers, freebooters, sea-robbers and oceanic pillagers (of whom we shall presently hear more) sought out and stole these valuable cargoes.

(2) **GULF STREAM**—Along the Gold Coast flows the Gulf Stream. Its warm waters are a phosphorus, indigo-blue, easily distinguishable from that of the surrounding ocean's sea-green.

This great "God-given warm river in the sea" was christened in 1770 by Benjamin Franklin when he was Postmaster-General of the Colonies. He investigated reports of ship-captains and skippers, resulting in his publishing the first chart of the Gulf Stream current. It is of such paramount importance and interest to deep-sea anglers that we will spend a few moments to learn something about it.

Professor Albert E. Parr (Scientific Director of the Yale Oceanographic Expedition, made in the Gulf of Mexico) is reported to have determined that the water of the Gulf Stream seems to enter into relatively little exchange with the waters of the surrounding seas; that the latter contribute little or nothing to this singular current. The current is said to be caused by the earth's rotation on its axis, combined with powerful trade winds,—so-called because navigators originally depended upon strong winds to blow and push the water, helping in conducting maritime trade—and variations in temperature between cold waters of the arctic and the warm equatorial waters. Other influences, such as the direction of the coastline, and the configuration of the bottoms over which it flows, affect it. These conditions heap up the waters of the warm equatorial current (warm water expands and rises; cold water contracts) bringing about a westerly flow, towards the Atlantic ocean.

Professor A. Hyatt Verrill¹ in his book *The Ocean and Its Mysteries*, (Duffield & Co., 1916) gives the reason:

"The great current flows out through the Florida Straits into the north because the trade winds in this locality blow almost steadily from the east. This 'blowing' and 'pushing' forces the water ahead; this water, moved continuously westward by its force, seeks a course between the West Indies archipelago and the Gulf of Mexico. As the Gulf is enclosed by solid land (on all but its eastern side) the water cannot move further west. And as the pressure from the east continues, it finds its outlet in the only available opening—which is the Florida Straits"

The Gulf Stream² is also referred to as the "Carribean Current". From southernmost evidences some think that it issues between the western end of Cuba, and the end of the Florida keys in the vicinity of Dry Tortugas; there it starts on its long journey. Its width varies from sixty to ninety miles, with a depth more than 3,000 to 5,000 feet in some places as it moves into the sea. This current forces itself through the Florida straits at a speed of three to six miles per hour. It pours more than 436 trillion tons of water daily into the Atlantic as it pushes itself upwards along the keys toward Miami. At this point it stretches across to the Bahama banks, turns northeastwardly and flows along the Florida East Coast past Palm Beach, already a distance of several hundred miles from its origin.

Variations in the Gulf Stream's course are negligible and fleeting, and occur only on the surface a few fathoms deep. These very slight changes may be due to heavy winds, variations in barometric pressure, seasonal temperatures and fluctua-

¹Author, also, of the interesting volume ROMANTIC AND HISTORIC FLORIDA—a condensed history of the state, which reads like a story of adventure—(Dodd-Mead & Co., N. Y., 1935).

²If authorities are correctly interpreted, the prevailing wind in winter along the lower Florida area is from the northeast. That is, the tropical atmospheric pressure is blown out towards the sea bordering the land on the Southern end of the peninsula. Although the opposite effect (that is, trade winds being thought to be blown from the sea's Gulf Stream onto the land) may generally have been imagined to be the case, it seems that is not so, as explained.

Moreover, tropical atmosphere is hot (for example, Cuba even in mid-winter has an average temperature of 90° or more). So, if the heat of the tropics is blown off the land, the climate is, thus, tempered. Were this not so would not the intense tropical heat be unbearable if combined with that of the Gulf Stream's heat?

Commodore Matthew F. Maury (1806—1873), whose oceanographic works won him well-deserved recognition in all parts of the world, and out of whose efforts grew the U. S. Naval Observatory and the Hydrographic Office, says:

"The quantity of heat discharged from or over the Atlantic by the Gulf Stream in a winter's day would be sufficient to raise the whole column of atmospheric pressure that rests upon France and the British Isles from the freezing point of 30° to summer's heat (78°)."

Isn't it because of the theory, above described, that the Gulf Stream has such a delightful effect upon South Florida's climate?

tions of the currents which feed it. Farther down, however, the current flows with unceasing regularity. Its course is as definite and fixed as that of great land rivers. Its banks are composed of its own water—the color of which distinguishes it from adjacent waters. The surface temperature is about 85° F., while on the bottom the average is about 45° F. Navigators moving northward keep in the Stream, to take advantage of its steady northern drift; those traveling south avoid the current.

Farther north this interesting body moves away from shore and sweeps out into the bosom of the broad Atlantic, continuing north until it fuses with the Labrador current at Newfoundland off Canada. During this great travel or passage it gradually spreads, its rate of flow diminishes and the mean surface temperature drops several degrees.

It has been considered that the Gulf Stream has a profound effect upon the climate of nearly all Europe, particularly the northwestern portion, but some authorities are discarding this theory.



SUN DISK

(3) **BENEFICENT SUNSHINE**—Because of its exceptionally delightful tropical climate, wealthy families from colder sections of the country erected vast winter places along the Gold Coast. Their homes may be properly classed as mansions, adorned with the richness and display of ancient potentates, and manned by staffs of servants and all else that goes with such elegance. During prosperous periods money poured from the occupants freely (some for no better reason than to outdo their neighbors) in ambitious, lavish entertainment and splendor. It attracted thousands, many of the newcomers becoming habitual seasonal residents.

Scarcely a day passes when the blue, tropical heavens in this blissful region does not emit its almost perpetual sunshine. Deep-sea fishing and sunshine blend perfectly for the angler's benefit. In fact, the sun's healthful rays are about as beneficial

as any aspect of fishing leisure¹. Together they accomplish the most perfect results. This is primarily because of the improvement in tone, bodily vitality and the resistance to disease which sunshine gives.

As far back as records can be traced, sunshine has always been observed to have a rejuvenating effect upon the human body. Authorities report that:

"Sun rays restore vigor to muscles and energy to the mind. A tanned body is a healthy body. Sunshine raises the calcium, the phosphorus and iron content of the blood. It stimulates the metabolic process. It quiets the nerves".

Fishing in tropical waters gives the body a needed opportunity to become properly sunned and tanned. Especially is this true when it is accomplished in the backwater areas and oceanic channels during the day, in the nude or semi-nude, at intervals, as is the privilege, custom and practice of salt-water anglers. For them the "Gold Coast" has this added appeal. The outdoor recreation plus the health-giving, life-extending qualities of sunshine lures angling devotees back to their favorite haunts year after year.

(4) REAL ESTATE TRANSACTIONS—In 1783 England traded Florida to Spain for the Bahama islands. Thirty-six years later (about three hundred years after Ponce De Leon's Florida adventures and explorations) James Monroe, fifth U. S. President, bought the East and West Floridas (58,666 square miles, 7% more being water surface) from King Ferdinand VII of Spain, notwithstanding Napoleon's claiming the Floridas as part of conquered Spain's colonies. For this the United States paid the trivial sum of five million dollars in 1819. Four years later it became elaborated in the famous Monroe Doctrine. This was Florida's first real estate transaction. Andrew Jackson was appointed first military governor, 1821-22.

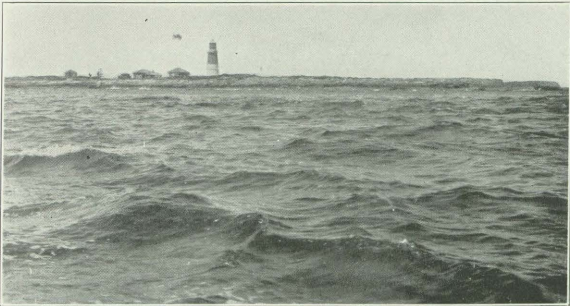
Twenty-six years afterwards, on March 3, 1845, this territory was admitted to statehood. Half a century passed before the lower part of the territory was "opened up" by Henry M. Flagler's extending his East Coast railroad into Miami nine years after he commenced the erection of palatial hotels at St. Augustine.²

¹For this climate the most comfortable deep sea fishing clothing consists of a suit of white cotton pajamas, sun glasses, hat or helmet, white, lightweight wool socks, and tennis shoes.

²In 1910 Florida's population was 752,619. Then years later it increased 28.4% to 966,296. The 1930 census gave it almost 1½ million inhabitants—110,638 being in Miami, and 12,831 in Key West.

In 1925 (106 years after the U. S. purchase) it was followed by the greatest real estate boom in history. Unprecedented sums of money were sent from everywhere posthaste to lower Florida, to conduct real estate trades. Mildly expressed, untold millions of dollars poured into Miami daily; and more to adjacent points. This quickly changed hands, in addition to the countless more millions that were exchanged through "binders" and other paper transactions.

During the months the boom continued, money references sounded like telephone numbers. Parcels of land—in many instances "little more than huge chunks of mosquito infested, partially submerged swamp"—places which landscaping artists and architects changed into magnificent hotels, golf courses, private palaces on great estates and business centers were sold daily at fabulous prices. Frequently, a single transaction alone involved more than the original price paid for the entire territory that was Florida. These boom time trades were often consummated in a few moments, as contrasted with negotiations with Spain for the territory's purchase, which was over a period of eighteen years.



LIGHTHOUSE AT GUN KEY
(South of Bimini Island)

THE EVERGLADES

OUR ULTIMATE destination (where we are to perform our sacred rites as devout fishermen) is known as the *Ten Thousand Islands*. The region has become nationally known for salt-water fishing. Rod and reel enthusiasts gather in this locality 365 days in the year.

To reach it two choices of routes are available: One is to motor down the West Coast of Florida, passing Sarasota and Fort Myers. About seventy-five miles south of the latter city, on the Tamiami Trail¹ is a canal-bridge with an overhead sign, "CARNESTOWN". At the bridge's approach, opposite the canal, is a huge road sign: It calls attention to the fact that three minutes ride off the "Trail" is "EVERGLADES CITY—SPORTSMAN'S PARADISE". This is the gateway to the famous Ten Thousand Islands.

The alternate route is via S. W. 8th Street, Miami. Passing Coral Gables (adjoining the western city limits of Miami) one continues about eighty-five miles due west on the Trail. A short distance further west, beyond the village of Ochopee, is the "Carnestown Bridge", where the turn is made as above stated, to reach Everglades City, a total distance of about ninety miles.

The eastern portion of the Trail runs through the heart of the Everglades, a region practically untouched by civilization. It takes its place along with the other natural wonders in Flor-

¹THE TAMIAAMI TRAIL is the first and only major conquest of the impregnable Everglades. The idea of this great roadway was born about 1914 in the brain of William Stuart Hill (former news editor of the *Miami Herald*). He and another enthusiast, Captain J. F. Jaudon (then county tax assessor, and Miami civic leader) kept the project before the people of Florida. Eleven years and six million dollars were required to complete this scenic penetration into the mysterious Everglades.

This bold accomplishment is a tribute to man's daring and genius in its construction. Surveyors worked waist deep in muck and water, as did those who cleared the path of jungle growth. Drillers bored, foot by foot, down into hard coral rock below the boggy surface. For ninety miles a path had to be drilled and blasted, after oxen, four to a cart, hauled explosives to the scene. When oxen could not proceed further, men shouldered the boxes of dynamite and floundered, neck deep, through the muck. Giant dredges then were brought up, throwing piles of rock from the canal they dug to get the material for this roadway. Pile drivers performed the herculean task of setting pilings fifty feet deep into the quicksands, down to solid rock foundations.

The Trail commences on the eastern fringe of the desolate region just beyond Coral Gables—that ultra-modern city, conceived and built almost overnight by youthful George E. Merrick at a cost to investors of untold millions; now an enduring monument to Florida's unique real estate boom, adjoining the city limits of Miami, its great East Coast neighbor. The Trail connects Miami and Tampa and intermediate points on the west coast. For more than a hundred miles it unfolds itself from east to west straight across the lower part of the Florida peninsula. Then it continues north along the West Coast to Fort Myers, Sarasota and Tampa. The total distance from Miami to Tampa is 284 miles.

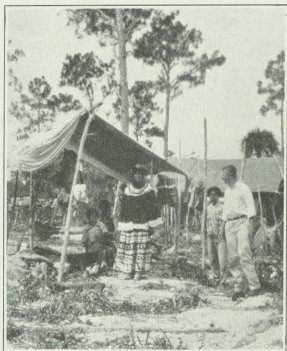
ida. The area it comprises is estimated at $2\frac{1}{2}$ million acres. Its width ranges from ten to seventy miles, the average being about forty-five miles. The greatest length is about one hundred and sixty miles. The whole includes about five to seven thousand square miles. Much of it is below sea level. It extends from the southwestern sides of Lake Okeechobee (which itself contains an area of seven hundred and thirty square miles), merging gradually, but irregularly with the Allapattah flats—a region largely submerged by the end of the rainy season. On the south it extends about one hundred and ten miles, through the counties of Palm Beach, Lee, Dade and Monroe. The area encloses thousands of islands, a great many being covered with dense thickets. The eastern boundary is from five to twenty-five miles from the Atlantic coast. The western limits are a mean distance (from the Gulf of Mexico) of about fifty miles.

Most of this singular solitude is a vast, fresh water marsh. It is covered by a deposit of soft, fine, slimy mud-ooze and saw-grass morass in a great limestone basin. At first sight the broad expanse and natural picturesqueness is fascinating. The water is supplied by the overflow of Lake Okeechobee and frequent tropical downpours; totaling six to eight inches in some months between May and October. Natives call these "show-ers". By whatever name, they flood the terrain, a very limited movement of the water taking place, only to the south. The country is level and does not drain off naturally. This gives rise to the peculiar land surface. A rise of two feet in water level will immediately change hundreds of square miles into a great series of immense, shallow, swampy areas.¹

Not all the Everglades is so inundated, however. Much of it is interspersed with broad cypress swamps and savanna or green grassy plains. Some of its surface is intermingled with palmettos, pine land and salt meadows or dry hammocks—local name for the jungles consisting of tropical hardwoods; and patches of high grass. These vary in elevation and size from a few feet to several miles in length. Occasional spots are covered with tangled vines and shrubs.

¹DRAINAGE OF THE EVERGLADES was commenced in 1907. Part of the expense is borne by the U. S. Government, some by private companies owning the land, and part by the State of Florida. A huge canal has been cut into the sea, to which laterals are run. The initial project resulted in about $1\frac{1}{2}$ million acres being drained. Subsequent plans call for a million additional acres to be reclaimed. The work is done at tremendous cost. A very small portion of the reclaimed land is occupied by settlers who grow many kinds of tropical fruits, vegetables, etc.

Just above Cape Sable (the southern tip of the mainland) is Whitewater Bay; into this drains some of the overflow. Farther north, out of the state's lower western edge, appear ten immense rivers¹ which draw off some of the stagnant water and pour their overburdened contents into the adjacent Gulf of Mexico.



SEMINOLES — Remnants of once mighty tribesmen whose lineal descendants still roam the Everglades fastness, continuing an uncivilized, nomadic life like their forefathers . . . in complete contrast to the white man's close-by civilization.

Except for a few hundred scattered inhabitants, (numbering perhaps five or six hundred souls, ragged, picturesque remnants and descendants of aboriginal tribes of Seminole Indians² who sought refuge or were driven to this seclusion by the white man) little human life can or does exist in this great land waste. A few small white-man communities have exiled themselves in this region, these being located at isolated points, where the ground is a few feet higher than the remainder, permitting them a poor, back country civilization at best. Belle Glade and Canal Point are examples.

¹WEST COAST RIVERS (south to north): Shark, Harney's, Broad, Rogers, Lostmans, Hustons, Lopez, Turner, Barrons, Fackahatchee. (See chart end of book.)

²SEMINOLES—The name is Creek. It signifies "renegade" or "separatist". They are probably related to the Creeks, Chickasaws or Choctaw tribes. Settlers in Georgia and the Carolinas drove the tribes southward; they took possession of the Florida territory about the time of the American revolution. Their history is interesting:

In 1834 their tribal chiefs agreed to remove to the special U. S. reservation in Indian territory. Osceola (1804-1838), Indian "as-se-hehar-lar", skilled youthful chieftan, was affronted by a U. S. Army officer; horrible massacres ensued and developed into the bloodiest, most fiercely contested and the most expensive of all Indian wars, the last of which occurred in 1858. At the end of six years all but a few surviving, starving Seminoles, "surrendered" and were sent away by their white conquerors. These bands of remnants, true to their name, "renegades", at the last moment refused to go; they secreted themselves in the Everglades fastness. Their lineal descendants continue the nomadic life, living uncivilized, like their forefathers, as barbaric custom dictates.

EVERGLADES NATIONAL PARK—In May, 1934, Congress agreed to set aside a large part of the EVERGLADES territory (in Dade, Monroe and Collier counties, Fla.) to be permanently devoted to fishing, hunting and sightseeing. It will extend a few miles north of the Tamiami Trail, proposed as the main traffic artery within the park. Included is to be Cape Sable, with considerable of the key region, and territory where unique tropical plant and animal life abound. Besides most of the 10,000 Islands, it will contain living cliffs of columnar trunks which rise abruptly out of the Gulf of Mexico resisting powerful wave attacks; also clumps of mangrove trees growing from water without visible means; shell mounds made by prehistoric races,—all unique and impressive. Other interesting features include tropical birds, of gorgeous and brilliant plumage, alligators lazing on logs or coral rocks, turtles so still they appear to be part of the natural landscape, native animals in the park area, including bear, deer, panther, etc.



—Capt. W. R. Alexander, Naples, Fla.

SEMINOLE MEDICINE MAN

An unusual and rare photograph of an extinct dignitary (taken at the beginning of this century). There now remain but a few hundred souls of this fast-dying race.

TEN THOUSAND ISLANDS

WITH THE profound dignity of nature, the Infinite Creator planted thousands of unshapely mangrove-covered islands in the aquatic solitude on Florida's West Coast.

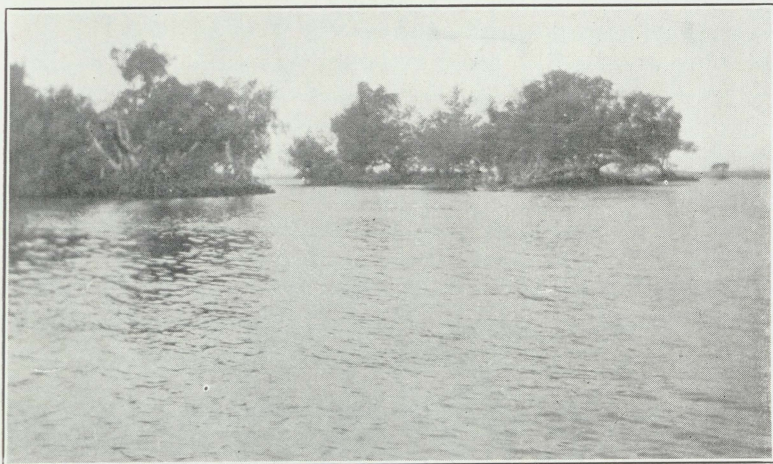
TIDAL ESTUARIES—Due to the tropic air these mangroves and a few other aqueous trees—which also use their roots as stilts, keeping their stems high—manage to grow over the tidal estuaries. The entire horizon is strewn with a series of these inexhaustible growths. They dot the sea landscape in every direction along the Keys, the Florida Bay, far below Cape Sable, along the west coast at the edge of the mainland, bordering the Gulf of Mexico, and north almost as far as Tampa.

On coming closer to them we notice some are hardly larger than bushes, which they somewhat resemble, while others rise majestically nearly a 100 feet in the air. They live by turning their roots into stilts, making dribbles of their seedlings. In this manner they reproduce themselves.

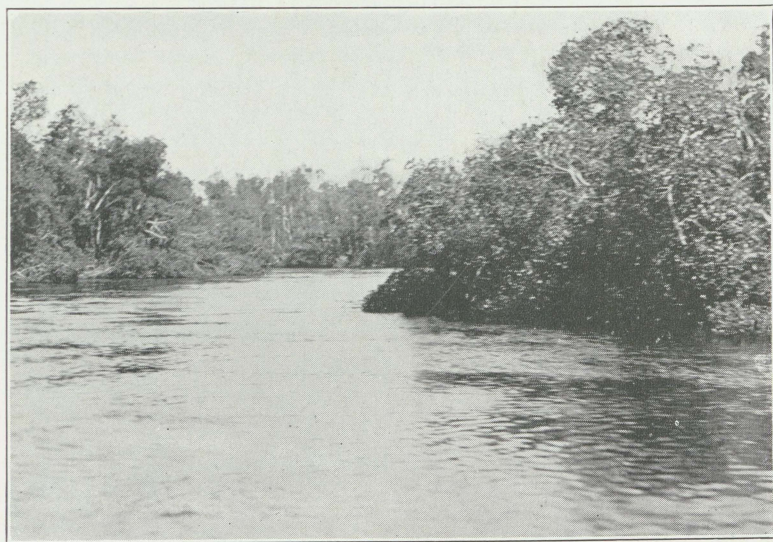
RIVER CHANNELS—To invade the *Ten Thousand Islands* the only practical manner is by boat propelled by motive power. Ample stores of provisions for several days' journey into the interior should be put aboard. We "jump off" (board our fishing yacht) at Everglades city docks. We first follow the course of *Barron's River* (named for Barron G. Collier). Immediately we find the watery region is so extensive all of it cannot possibly be more than partially explored in less than several weeks.

It contains hundreds of lagoons, large open bays, rivers, canals, creeks, and tributaries—channels of every shape imaginable. Much like huge veins in a gigantic body on a scale drawn in nautical miles these multiple watery bodies interlace and interwind amongst the thousands of mangrove keys. These impressive channels were formed many centuries ago. Their surfaces are so smooth at all times of the year that travel by boat is stimulatingly delightful.

Narrow and spiral-like in many places, meandering and twisting for short distances, suddenly they surge straight ahead for a hundred or more yards or part of a mile, only to be broken up and divided again and again by the numerous keys in their



With the profound dignity of nature the entire horizon is strewn with countless thousands of unshapely, mangrove-covered keys—"emerald isles dropped into a turquoise sea" . . .



Innumerable tidal estuaries, lagoons, creeks, tributaries, rivers, bayous, large open bays and other multiple water bodies of every description imaginable, interlaced and interwound, meander and twist, spiral-like, around the countless thousands of keys in the Ten Thousand Islands.

Not infrequently the great water channels run backwards in obedience to the heavy tides.

Throughout the length and breadth of this hundred square-mile elysium is the largest assembly of marine life . . .

paths. Around these green-leafed obstacles they wind, joining other currents. Then they are consumed a mile or two ahead by great tributaries which drain them into wide and deep, winding rivers. These, gurgling with their fluid contents, seek outlets through still larger river passages thus created. Finally, immense rivers pour themselves into the Gulf of Mexico.

No sooner is this drainage accomplished, however, than new tropical downpours cover the saw-grass prairies and fill these little invaded, snake-shaped channels which are located in every part of the coastal interior. The overflow remains until, finally, it finds its way to the sea in the manner described. The process is a never-ending one.

Contrary to the laws of nature, these great rivers not infrequently run backwards, disappearing into the inaccessible Everglades—at the opposite extremity. This is due to the heavy currents being influenced tremendously by the tides¹ which ebb and flow twice daily here with great force.

FISH FOOD—The muddy banks and bottoms of these tidal estuaries are full of small holes, about the diameter of a cigar. They may be compared to an immense sieve a hundred miles long and 10 or 15 miles wide. These holes are made by armies

¹TIDES are caused by attraction of the sun and the moon. The sun, though larger than the moon, is so far distant its attraction is only one-half as great as the moon's; so tides caused by the moon are twice as high as those of the sun. Both (the sun and moon) cause two tides daily. Water, being free to move, is drawn towards that side of the earth nearest the moon. The broader the surface the greater amount of water which flows, following the moon from east to west. As the earth turns on its imaginary axis these four waves follow each other unceasingly around the world.

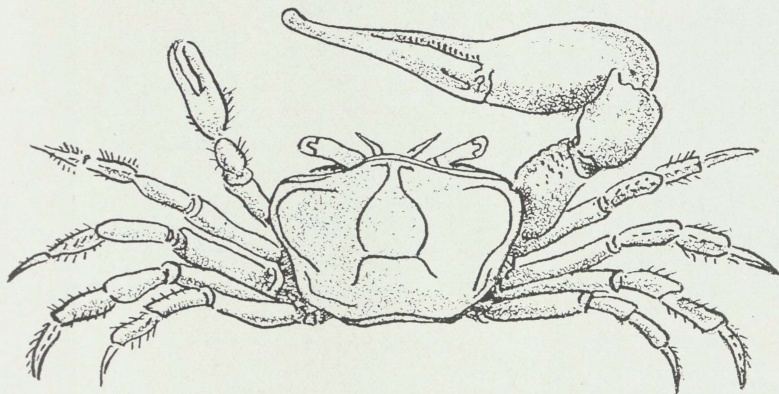
Normally, the seas ebb (fall) about 6 hours, then rise (floods) 6 hours. The highest floods and lowest ebbs occur in March and September (near the equinoxes), when the moon is nearest the earth. At the time of these "new" and "full" moons the tides coincide with the tides of the sun. Then they are called "spring tides". In the tropics these tides are "heavy." The lowest tides of the month ("neap-tides") are about $\frac{1}{2}$ as high as "spring tides".

Tides may vary in particular localities according to the winds, ocean bottoms, surrounding shores, currents, etc.

In the Keys, on the Atlantic ocean (southeastern) side the tide (which has a vital effect on fish and their habitats) is usually about $1\frac{1}{2}$ to 2 feet. On the opposite or gulf side it is often twice as much in certain places. In times of storm the entire region is churned into foam, but due to the mangroves on the reefs and shoals where the water has plenty of room to spread and not become piled up in pockets or narrow bays by the wind, not much damage is done. Southern Florida is in the lee of the north wind, which sweeps downward over the waters. The mangroves divert the winds upwards,—every twig and branch divides and checks their force. The area protected in its lee is said to be 20 times the height of the trees, which fight wave as well as wind. On some of the keys are larger trees of red and black mangroves and buttonwood; these form excellent shore protection in times of storm.

When a tidal wave enters from deep water into a broad river (like those in the 10,000 islands) it forces a mass of water inland. The energy thus created is spread up a narrow channel at the far end. *This has the most important effect upon fish habits.* Competent guides plan their fishing activities according to this.

of busy fiddler crabs. The male of this species has brilliantly colored claws. Both sexes scurry over the morass, popping sideways in and out of their holes.



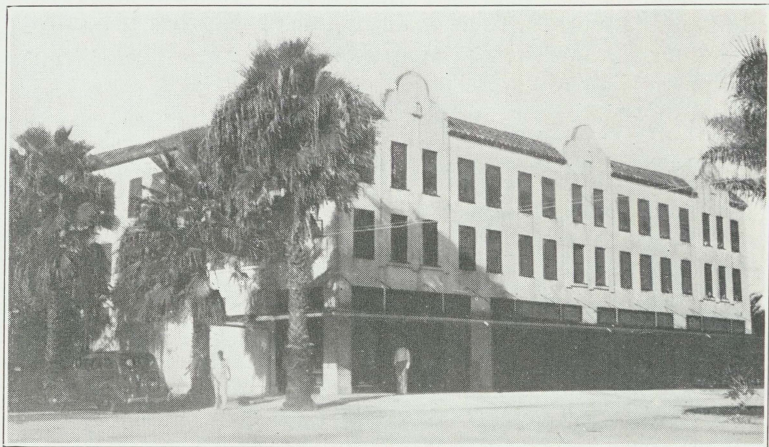
FIDDLER CRAB
(This Illustration is Double Actual Size)

In this unusual marine area this is most important for it is part of the supply of fish foods, which abound here in tremendous quantities. The varied assortment is made up of fiddler crabs, shrimp, oysters, water-insects, lobsters, fish-roë, fry, fish-life and various other victuals and materials. The supply, apparently, is unlimited.

There are some places in this region where tons upon tons of huge oyster beds and barnacles have been formed during countless centuries. Many of these parallel the water channels. In these "passes" may be seen masses of floating or partially submerged freshly spawned fishroe. If this is not eaten by the numerous fishes, it is hatched into millions of tiny fishlets; as soon as they are born they dart and flit about in the shallows. This activity is due to their frantic efforts to escape being consumed by their great enemies (including their own fathers and mothers, as well as other full-grown relatives).

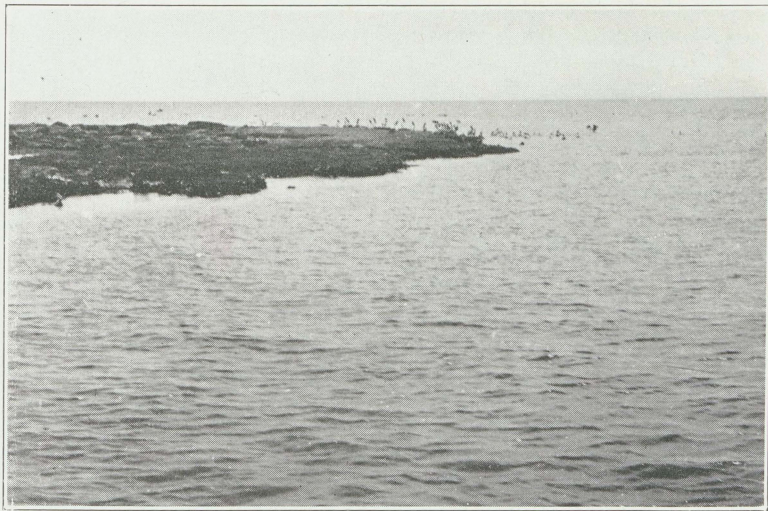
Such is the over-abundance of food for fish-subsistence and nourishment. It is almost without a parallel elsewhere.

Partaking of this great, unlimited supply of foods are thousands of birds of all kinds, lizards, coons, water creatures,—in short reptile, amphibian and fish, the strangest mixture of living things from air, land, sky, tree, key, briny-sea and fresh



EVERGLADES INN

Barron G. Collier, the nationally known advertiser, was one of those captivated by the tales, legends and agricultural promise of the Everglades. He purchased from the U. S. Government more than a million acres, designating the area Collier County. For its development his companies spent millions in varied construction. In the southwestern Florida extremity they built a new city (Everglades). It is now a thriving community and our last land destination. From its docks we commence our cruise to do battle with big game-fish combatants in the 10,000 Islands waters.



BIRD ROOKERY

The lower West Coast is the permanent home of fish, crustacea and bird life . . . almost without a parallel elsewhere. The strangest mixture of living things from air, land, sky, tree, key, briny-sea and fresh water . . . all assemble here, gorge themselves freely and leisurely . . . Each species fattens itself on the nourishing and satisfying junket; then, in turn, it itself is eaten by its own natural enemies of a different species.

water. All assemble here, gorge themselves freely and leisurely; each species fattens itself on the nourishing and satisfying junket; then, in turn, it itself is eaten by its own natural enemies of a different species.

Such is the mystery of nature! Were it not so their continued reproduction would soon overcrowd the ability of their habitat to contain them. Even man would, eventually, be crowded from this earth if the rapid growth were not checked in some manner.

FISHERMEN'S PARADISE—Because of the foregoing, throughout the entire length and breadth of this great elysium is the largest assembly of marine life—fishes—assembled! Thousands upon thousands of them!

Fully two-thirds of the 600-odd species of fishes which inhabit the Florida waters are here; from roe-stage to the gigantic tarpon and the almost extinct manatee (sea-cow). The waters literally teem with fish life! Anyone who is remotely acquainted with species, from an initial trip, could catalogue a large number of different kinds. Their customs and descriptions must be deferred for a later chapter. We will limit this section to the briefest possible comment on the haven we soon invade.

Into this unduplicated anglers' paradise come sportsmen from all the states, and even from foreign countries. Their passion for the sport rises to new heights when, towards sunset, the immense catches are brought in. Weights and measurements of unusual specimens are taken, photographs made, and during the evenings, in the lobby of the Everglades Inn, with the enthusiastic and sparkling personality of genial Claus Senghaus and Mrs. Senghaus, recitals of thrilling experiences and adventures become the order of the day.

Small wonder, then, that the novice soon becomes infected with the fishing disease—anglimania! To visit here is to expose one's self to this "catching" disease.

INSECTS—The lower West Coast marine wilderness is the permanent home of hundreds of prominent game fish and other species; crustacea, animal and bird life. Likewise, it is the greatest breeding place for countless insect pests, principally mosquitoes and sand flies. The immense areas of water in the region brings this about.

At times these pests are a real menace to human comfort. No method has yet been devised to entirely eliminate them. They appear to thrive on all the recommended insecticides, preparations and formulas (except pyrethrum powder, which is very effective when burned in a tin can or similar container, to cause a heavy smoke; this drives them away).

Probably, the quickest method to partially, if not entirely combat the pests is the most simple; likewise it is the least expensive. A thoughtful guide will load up with a supply of native black mango-bark. This, also, is burned (in a charcoal bucket or whatever else is available for the purpose) and creates a dense smoke. Simultaneously, it may work havoc by being blown into the fisherman's eyes. Joss sticks, too, secured before arrival in this vicinity, can be effectively utilized. If available, charcoal mixed with straw will keep the pests at a comfortable distance because of the smudgy smoke created.

There is a more approved method: If the mosquitoes appear, the considerate navigator will rush to "open" water. When the craft is several miles inland from the Gulf of Mexico, and it is inadvisable to run through the plentiful, narrow channels to reach a "pass" to the Gulf, a large bay is usually close by to which quick retreat may be made. Or, since mosquitoes are largely blown in by the wind passing over infested areas, oft-times fishing operations may be continued elsewhere in this immense territory where the mosquito is not present.

At night anchorage may be had in open water, in the Gulf of Mexico, a few miles offshore. When night-fishing for tarpon, bars of cotton mosquito netting, erected at the time of retiring, will prove most desirable.

Such temporary discomfort as might be met, however, is either quickly forgotten or, luckily, may be missed entirely on these trips by engaging competent and considerate guides. Their expert knowledge of conditions comes from a lifetime experience in the locality.

INVADING THE TEN THOUSAND ISLANDS

“WELCOME! Come! Visit this paradise for devout fishermen!” This is the sincere invitation extended to us by nature herself.

The overwhelming grandeur of this dazzling spectacle—to which only a few mortals are permitted to become eye-witness—is conclusive proof and definite evidence that no beauty can exist which out-rivals Nature’s own.

Each new hour our horizon becomes clearer and more enjoyable as we cruise along the bosom of the all-alluring river channels and passes—the only way for human beings to penetrate this area. Like perfect harmony in music, or rythm in poetry this panorama is absolutely incomparable. This lonely island coast, with its inland waters and peaceful landscape, is unsurpassed in perfect grace and charm! No matter how many previous visits here, new places remain to be explored. Thrilling adventures await to greet and entertain us!

EXPOSED WATER AND SKY—The rich scenery embraces the Gulf of Mexico, capes, bays, rivers, coral reefs, oyster-bars, keys,—all a unit of combined beauty! The whole is unstintingly dotted with thousands of mangrove key islets! Watery jungles, throbbing on every side, behind and in front of us! Rare birds of gorgeous plumage!

In this luxurious setting even the dawn and the sunrise take on the most delicate and dazzling colorings! Masterpieces are splashed and etched in the heavenly skyline! Nearly every part is worthy of reproduction in the stained glass windows of old-world cathedrals. All this rare beauty we may enjoy to our heart’s content. Only the occasional sounds of happy bird life is heard to break the celestial silence ordained for devout enthusiasts of rod and reel in this aquatic empire.

Adorned with nature’s lavish splendor, the entire arena is truly a fantastic fairyland! The accomplishment is possible only of the Infinite! Never did anything so utterly void of man’s tampering appear so thoroughly awe-inspiring, so completely harmonious!

In her wisdom nature decreed that no money value be put upon her processes in this marine extravagance. Such useless appraisalment would be inapplicable here. Was it not inten-

tional that no act of man will ever be able to change the scenic aspects, the natural beauty of this domain? Did not the Great Supervising Architect rule that this uncharted territory must remain virgin?

Man's ability fails when he seeks adequate expressions to describe these tropical surroundings. This is not possible even for poets and painters. Their qualifications, though superior to ours, are but feeble attempts in so worthy a task.

CONTEMPLATION—"I seek no glory, but my eyes are bright with visions of a just and lovely world."

Quiet! Contemplation! These reflect the angler's simple and comfortable attitude towards existence. In such retreats as this fishermen pursue their easy and indolent way of life, unconsciously appreciating the myriad interests and unsurpassed beauty which surrounds them.

After the first fleet hour we find ourselves breathing deep, bracing draughts of the animation of life. The calmness and harmony possesses us; it makes us tranquil. We are afforded a sense of appreciation to which mankind generally is alien.

We become endowed with refreshed vigor while we relax. We become recreated, respiration, reanimated and enlivened while our skin-coverings are bronzed by exposure to nature's healing sunshine. While indulging in our chosen endeavor we feel the material change which comes over us. We learn that the purpose of living is to enjoy life.

"Happiness is not bought with gold. The only ethical goal is pleasure"—this is the fundamental law laid down by one DEMOCRATUS of Abdera 400 years before the Christian era.

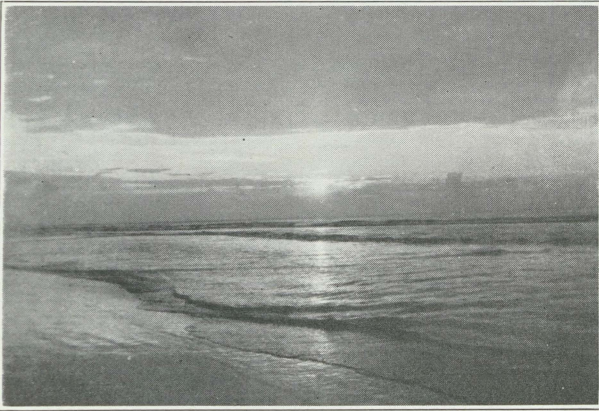
While thus blessed our desired activity is born anew. Our favorite hobby is given full play. His fish-majesty beckons; he offers to delight us with thrilling performances. Automatically we become electrified into giving vent to our fishing passion. We may become satisfied temporarily, but never weary of this thrice-agreeable diversion.

We, who are anglers at heart, merely tolerate but do not approve the maddening crowd, with its quota of hero-worshippers. Fishermen do not prefer the arena filled with shouting exponents. Rather, our fraternity abhors grandstand applause. We seek privacy, not publicity. Ours is a desire to

actually perform the sporting endeavor, not merely witness it from the sidelines. We have no objection to being shut away completely from all except our carefully selected companions and the picked seamen who are our ship's attendants.

Moreover, on these ventures, we do not dress for display or parade. Contrarily, in the watery wastes, we only partially clothe ourselves, frequently disrobe, as our individual comfort and pleasures—not mankind's customs—dictate.

Under such soothing conditions to each of our lives is added years of health. Time moves silently, quietly, and agreeably.

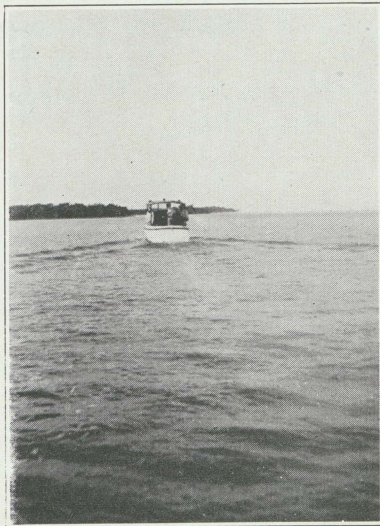


EXPOSED WATER AND SKY!

Masterpieces splashed and etched in heavenly skylines add to the beauty and dignity of the tropical shoreline.

BIG FACKAHATCHEE PASS

One of the hundreds of river-channel outlets to the Gulf of Mexico on the Everglades' western edge. In such vantage points as this we seek gigantic tarpon.



LOPEZ, GUIDE

*From my guide I have gained much lore;
From my companions greater store;
From my lov'd disciples, even more.*

—The TALMUD, Tannith-Ta.

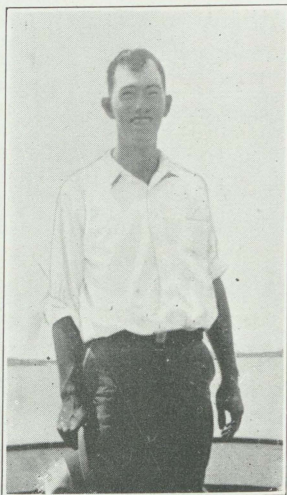
AS GUIDE and navigator we have engaged one who is thoroughly familiar with all the multiple passes and channels leading from the interior of the Everglades of the Gulf of Mexico in the Ten Thousand Islands.

His expert knowledge makes it possible for us to cruise around in the seemingly endless domain, even on darkest nights, instinctively and unhesitatingly, with excellent results.

Because he has proven his uncanny instinct, superior foresight and marvelous ability for this duty on similar ventures, we may be considered fortunate, indeed, to have secured the services of none other than the far-famed GREGORY LOPEZ. His knowledge and experience make him an authoritative specialist, he having spent his lifetime in this district.

Trapper, hunter, fishing-guide par excellence! Typical outdoors and marine frontiersman! Few persons know (and fewer still as intimately as he does) the habitat and characteristics of game-fish warriors. In all of this, as in other respects, he is superior. This noble fellow possesses unusual tact and rare judgment. To trust a lesser authority would deprive us of a valuable source of reliable information. He performs a variety of functions, including that of navigator, guide, friend and shipmate. Intimate friends call him "Grady."

Understanding and honor, a sense of humor and wit are some of his rich qualities. His courage and daring are marvelous and contagious. These traits make for our own happiness. Besides, "Grady" is an able provider and a competent chef; he acts as "master of ceremonies" and is our all-around, worthy

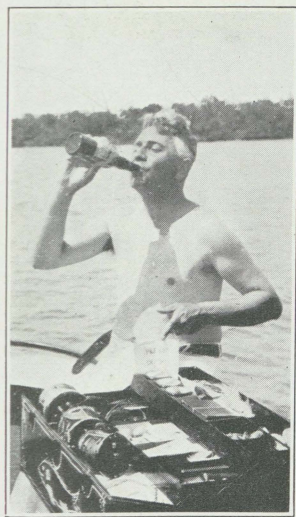


assistant as well as "Professor in Fishing". Withal, he is one of the most interesting persons we can have in our party. We listen, enraptured and thrilled, while he tells us of rare old legends, lore and traditions of the mysterious Everglades.

The acrobatic doings of some of our aquatic prey are sufficient to turn one's hair white, to make it stand on end. At such times of stress Grady courageously champions the rights of the fish-pillager, without fear and without reproach. With him to guide us we have naught to fear of becoming forever lost (not an unlikely happening) in the vast uncharted recesses of rivers and bays which border the Everglades on the western (lower) coast.

Like all devout fishermen, Grady is an interesting volume (if you can read human nature). We will have many opportunities for this on our trip. In this part of the universe, completely apart from and in contrast with the rest of it, we are stripped of all formality. Our normal dispositions and characters become quickly exposed.

Cardinal John Henry Newman, (1805-1897) English theologian and writer, said, "It is almost a definition of a gentleman to say that he is one who never inflicts pain. He makes light of favors while he does them. He seems to be receiving while he is conferring".



Uncle Ben refreshes himself after "jerking a tarpon's head off".

If one is resourceful; if he has an abundance of common sense, and the ability to make proper use of it; if he has the proper mixture of wit, variety and humor; if he be generous and kind; if he is companionable; if he is inherently honest and sincere in purpose, with ideas and ideals genuinely lofty; if he treats nature subjects with delicacy,—that person, be he city or college bred, or river-rat or backwoodsman, is entitled to be called, "Eloquent".

COMPANIONS—Genuine companionship is a blissful state of heavenly existence. Friendship, that rare, sweet, holy thing, so lovable and desirable, will consecrate our efforts. It will enshrine us to each other. When properly developed on this planet of doubtful worth real friendship ripens and expands; its powers magnify themselves for mutual benefits. It causes lasting gratification.

The lack of it, especially on occasions like this, would be hell. Without friendships no man, regardless of his creed or lack of one, has ever fully lived. It matters not how much money one accumulates, nor how vast a power he wields, or if none: a true friend may be reckoned with nature's masterpieces. In its final solution it makes for real happiness, satis-



ANGLING COMRADES—From companionship grows friendship, that blissful state of heavenly existence . . . that rare, holy thing so lovable and desirable which enshrines us to each other. Its powers magnify themselves for mutual benefit and cause us lasting gratification. We become lifted to that high plane of angelic harmony befitting devout fishermen. Our countenances reflect our cheerful spirits and happy mood.

faction and contentment—the priceless ingredients of life the world has ever held precious.

Completely out of touch with other human contact for days, under circumstances sometimes trying, on our own limited resources and far from a base of supplies, our time will be spent entirely on a small cabin cruiser (about 28-feet in length). We must, therefore, not allow ourselves to digress from softness of manner. An abundance of self-control and patience must be exercised by everyone aboard. We must not be caught amidstream by display of disagreeable traits or acts. True bonds of fellowship must prevail.

Perfect accord and mutual understanding grows not merely out of a desire to be friendly, but out of like interests and activities. Then, like the delicate perfume of scented flowers, it has its own values and rewards.



"My companion, my guide and my own familiar friend."
—Psalm XLIX—15

GREGORY LOPEZ (right)—To him clings many of the original customs and traditions of the untamed Everglades. Expert tarpon and all-around salt-water angling guide, hunter, trapper and companion of your humble "Dean of Fishing", his masterly accomplishments, sturdy dependability and buoyant personality distinguish him as an adroit sportsman, the result of a lifetime of experience.

"Grady" and his two brothers (all born on one of the tiny island spots in the vast Ten Thousand Islands' watery wilderness) are sons of a recently deceased, former sea-roving Spanish patriarch-squatter.

CHAPTER THREE

Dry Tortugas

Most tragic and mysterious of isles; grim reminder of incalculable toll and tragedy, toil, staggering expense, suffering, disease, eerie death. . . .

UNCLE SAM'S LAST FOOT OF GROUND

THE HELL ON TORTUGAS—Fort Jefferson—Inception—Outer Wall—Moat—Inside the Citadel—Cells—Parade Ground—Occupancy—Other Uses—Today's Ruins—Markings—Ever-Changing Moods—Mystery Grave—Bird Key—Mystery Craft—Loggerhead Key.

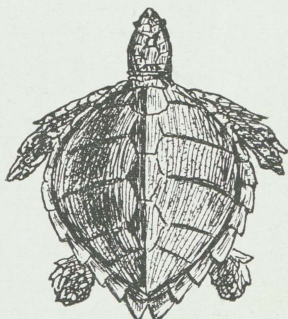
PROCLAMATION BY THE PRESIDENT OF THE UNITED STATES—Chart of Tortugas Island group.



THOSE devout anglers who literally throw discretion to the winds (which here constantly blow a gale) are permitted new experiences amongst old discoveries. Escaping boredom in genuine fishing enjoyment, those who have "crossed to Tortugas" are torn between two conflicting emotions:

(1) an uncanny and haunting desire to revisit there, and (2) a hesitation to again undergo the hardships and dangers of the necessary voyage.

UNCLE SAM'S LAST FOOT OF GROUND—In the midst of the watery waste, approximately 120 miles from the Florida mainland and 60 to 70 miles west of Key West, Ponce de Leon—still searching for the fabled "Fountain of Youth"—after his mainland exploits in 1513, discovered this singular archipelago. Originally it consisted of probably ten low-lying, shell-and-sand bars. Because he captured on them 170 tortoises¹ he named the island group "Dry Tortugas" ("dry", probably, in the seaman's sense, indicating that it is not awash, like other shoals and low-lying islands; "tortugas" being the



LOGGERHEAD TURTLE

¹Tortoises are primarily land creatures; turtles are water inhabitants. "Tortugas" is from Latin, "TORTUS", meaning "twisted, crooked, contorted."

Spanish word for "turtle"). They differ materially in make-up, appearance and history from the other keys we have visited.

Could these destitute little island-keys speak, they would recite to the seldom-visitor to them how for decades before official notice was paid them they were the unwilling refuge and lair of the most despicable murderers, the greediest bands of buccaneers, smugglers, pirates and oceanic outlaws that ever existed. While not transgressing and adventuring in the nearby Spanish Main circuit, searching out, looting and scuttling merchant ships, the sea-desperadoes gathered in this isolated spot to careen and divide the enormously rich assortment of spoils, treasure, merchandise and supplies which they foully and brutally plundered.

They would unfold a tragic record of hurricane visits,—typhoons whose winds were driven so furiously their speed exceeded the ability of today's gauges, had they been then available, to measure the velocity of the "blows" which tore limbs from sockets of humans; torrents which hurled sea water by the thousands of tons with such devastating force it battered down naval docks, wharfage, and smashed and dismantled coal-storehouses located on the main channel; crushed concrete and brick architectural construction and sheet iron walls like so much paper; and twisted and hurled these, along with their supporting iron girders, hundreds of feet in air, mixing and blending all of it as though composed of light cotton twine; besides ripping off the surface of the unfortunate keys, and reducing them from a few feet above to a point below sea-level, causing some of them to be no longer visible even at low tide.

Of the lonely, barren islands now observed, at the mercy of wind and wave, only about one square mile total surface barely exposes itself through the combined lot of these keys. Like some of their brother-keys which were once exposed, two of the seven still seen in the group appear to be "sinking"—decapitated. The others extend about 10 miles from east to west, and sit like a majestic overlord in the maelstrom of the Gulf of Mexico.

In this stretch of malevolent ocean, feared by small-ship mariners, they form the end of the great Florida reef, off present ship-traffic lanes. They are the last, too, of the vast domain of Uncle Sam.

Three immense, deep, natural ship-channels run their course in this dangerous and inaccessible mooring; it is almost im-

possible to locate these vessel-passages on dark and stormy nights. The unfortunate keys are surrounded by treacherous, jagged reefs and shoals which are accountable for numerous battered hulks and loss of life. Except for the hermit lighthouse-keeper on the last key—"LOGGERHEAD"—the islands are devoid of habitation. Gigantic, tumbling tidal-waves combine with the fury of howling winds and powerful elements to ward off those whose business may be other than deep-sea gamefishing.

We will risk the expedition. Picking what our skipper (Captain Appleton Sawyer—who prefers to be called "just Happy") thinks is a "fairly good day for it" we cross to Tortugas.

To the elect of our GRAND FISHING FRATERNITY this marine precinct is a locality on calm days of supreme delight. The gorgeous coral bottoms in this compound give the sea a beauty and exotic coloring which defies description. It is equaled only by the great number and variety of fishes here. Countless thousands of them—various sizes, colors and shapes—dart about in the crystal-clear, shimmering waters surrounding these keys.

Daring anglers risk their physical well-being, and even their lives, in coming to this hurricane-swept, desolate habitat of sea-fauna to tackle big game fishes. It is destined to become one of the world's fishing paradises. Enthusiastic fishermen are afforded ample reward; they find here, too, something in addition—things which grip the emotions and leave them spellbound.

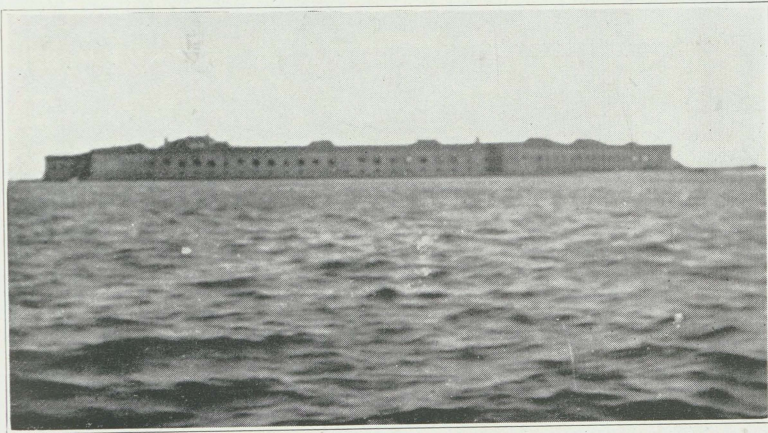
THE HELL ON TORTUGAS

FORT JEFFERSON—Within a comparatively few hours we come upon a giant phantom. It looms out of the depths. Its weather-stained outline is an immense, hexagonal structure. In the fathomless wilderness it rears itself on the horizon.

“Once she was flamboyant and gay! But with the deepening of the shadows against the pageantry of a flaming sunset her mood and disposition changes”, wrote one who had observed and attempted to describe this scene. “She becomes seductive, mysterious and whispers of past tragedies and fatal events.”

This is all that remains of the world’s strangest and most gloomy, solitary prison-fortress. Ironically, it sits on *Garden Key*—the island’s name belies its true status! The extraordinary citadel of the sea takes up 16 of the original 25 acres formerly exposed. The remainder has suffered itself to be “washed” away by the elements just mentioned.

Fort Jefferson’s history is as sombre and gruesome as its location is inaccessible and formidable. It teems with a mixture of architectural achievement and adventure. It has a beauty, a strangeness and an individuality all its own—one that is awe inspiring and tragic.



THE “HELL” ON TORTUGAS

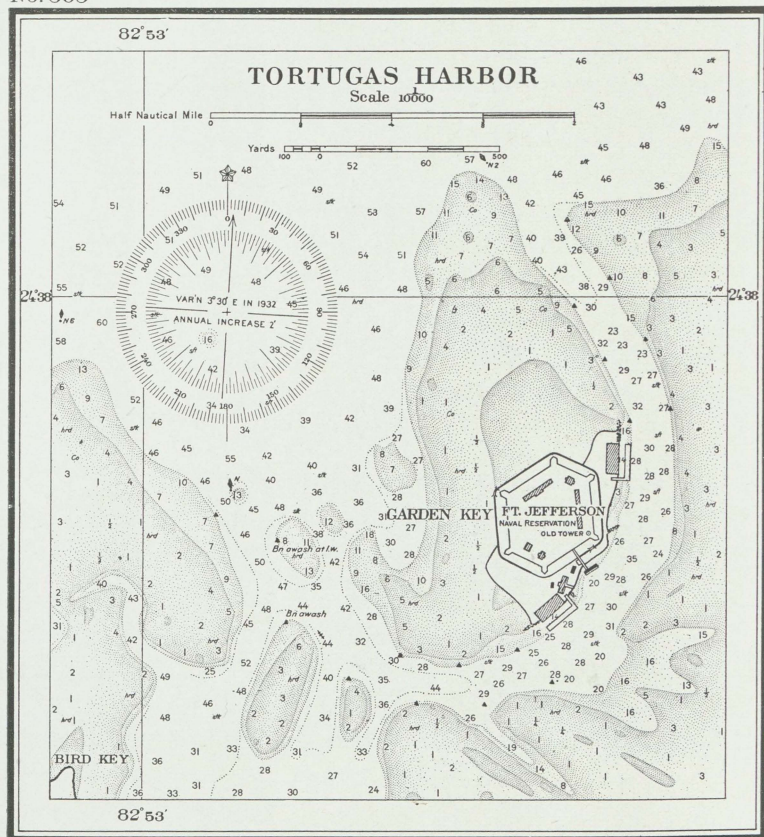
Massive, silent, brooding! Fort Jefferson is sheer-rising like a lone marine-sphinx in the most desolate maelstrom of the Gulf of Mexico, away from s. tp-traffic routes.

To make this mighty citadel arise from the yawning sea, men sweated under the blistering, tropical sun while their brains cooked; tropical fevers raked their naked, burning bodies; sand storms filled the air with coral spicules which dug into their skins like millions of miniature knives; savage gales with cyclonic intensity blew many of the forced laborers into the frothing, billowing sea adjoining . . . But the construction on Garden Key went on . . .

What was its purpose? What diabolical mind conceived its erection?

To make this mighty citadel arise in its ultimate shape from the yawning sea, immense hordes of men—mostly blacks, slave laborers—worked unceasingly. Vast shiploads of materials—brick estimated at 25 to 50 millions (said to have cost exceeding \$1.00 each in transporting them here), thousands upon thousands of tons of granite, cement, lime, mortar, hand tools, lead, planks of choice lumber, trowels, bolts and iron-work,—in short, every piece of equipment used in its building had to be brought to this God-forsaken site from its far-away point of manufacture. Every pound and piece had to be routed down the Atlantic coast by sailing vessels from New York,

No. 585



Soundings in feet
 Courtesy U. S. C. & G. S.
 Not to be used for navigation.

Philadelphia, and other places more than fifteen hundred miles away.

Without the benefit of modern, labor-saving machinery and devices, as one writer says:

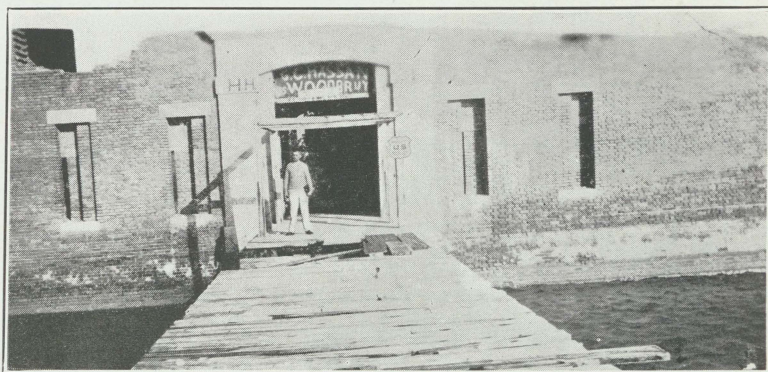
" . . . men were driven to perform servile hand-labor; they sweated under the blistering, tropical sun, while their brains cooked. Tropical fevers raked their naked, burning bodies with agonizing pain. Sand storms filled the air with coral spicules—these dug into their skins like millions of miniature knives With cyclonic intensity savage gales blew many of the forced laborers into the frothing, billowing sea adjoining. Immediately one transport of slaves sickened and died—of dysentery, scurvy, typhoid, malaria and other tropical fevers—a new batch of them would be brought to the miserable scene to take the places of the unfortunates Millions of overgrown, barbarous mosquitoes feasted on their exposed flesh until they became crazed The building-conditions at FORT JEFFERSON were a hundred-fold worse than must have existed during the erection of Egypt's pyramids"

But the construction on *Garden Key* went on and on, in spite of these and other inconceivably difficult conditions.

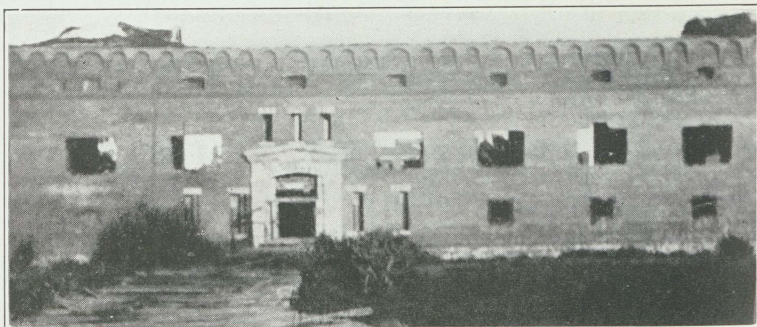
INCEPTION—What, you ask, was the purpose? What diabolical mind conceived its erection?

Fort Jefferson is linked up with the piracy and adventure of the Spanish Main. It was ordered constructed by the United States War Department in 1845. Andrew Jackson directed that the fort be built and strongly fortified, because during the first half of the nineteenth century one of the main, great trade routes for American shipping lay through the straits of Florida, past the Tortugas keys. Throughout the entire region the menace of sea desperadoes and pirates was seriously to be reckoned with. Spain's possession of Cuba, too, constituted another hazard, in event of an already predicated war with Spain. Fourteen years were estimated by the Engineering Corps as the time necessary for completion of the "Gibraltar of the Gulf" on this sand-bar, the highest point of which was barely 5 feet above sea-level. Its sponsors and designers intended it to be the peer of all fortresses. This citadel must outrank and outrival all others on the earth! Never was a vaster enterprise conceived by the mind of man. Certainly none more impressive was ever undertaken. Briefly, such was the ambitious plan.

OUTER WALL—To enable the unflinching workers and their overseers, marooned on the little spot, to continue work



The gaping sallyport with its great medieval draw-bridge is the only means of entry or exit . . . The moat, filled with savage barracuda and half starved sharks, added to the Fort's fantastic cost of construction . . .



. . . No scene in war torn Belgium's villages was more devastating after a series of German sieges than is Fort Jefferson. No single thing is left intact. Decay, rot, ruin, waste and destruction have alternated and combined with the fury of the elements . . . The citadel, wrecked and stripped of its former grandeur, stands in grim silence. . . .

under the hazardous and painful conditions, the hexagonal outer walls, each 450 feet long and sixty feet high, with bastions and moat, were ordered constructed first.

This 5-foot-thick enclosure with its gun casements, alone was classed as one of the miracles of engineering. Its foundations were made to rest on almost solid coral rock, 10-feet below sea-level. It was built of cement and coral rock. The exposed portion rose 50 feet towards the sky, lined with the finest brick obtainable, each laid with utmost precision.

To mount 243 huge-caliber cannon—each 18 to 20 feet in length, weighing several hundred tons, mighty and elephantine in size and power—the bastioned, castellated enclosure was designed. And these guns were actually made. They were brought to the Fort and placed—somehow—in position. There were 3 tiers or rows of guns in each wall, eighty to each side of the Fort. Ironically, not a single one of them ever fired a shot, notwithstanding the huge stacks of cannon balls, with diameter each as large as a man's head, pyramided and located conveniently between the numerous tiers of cannon.

MOAT—Circling the great fortress, making access to or escape from it almost impossible, appeared a feudal moat. This wide and deep trench around the bulwark's rampart was 70 feet wide, 25 to 30 feet deep. It was filled with sea-water let in through the immense cisterns placed underneath the great wall.

The moat merely added to the fantastic cost of construction. Escape¹ from Fort Jefferson made it necessary for a prisoner to risk his life in a foolish attempt to navigate the moat first; then swim the fathomless depths of the restless Gulf straits. Nevertheless, to "take care" of any overconfident, foolhardy prisoner who attempted to get out of the confinement, in the moat were kept ferocious, man-eating sharks and half-starved, savage barracuda. These would tear into bits and consume anyone unfortunate enough to test the moat's crossing except via the great drawbridge which was heavily guarded by man and steel every moment of the day and night.

INSIDE THE CITADEL—A large, interesting volume would be required to give a detailed description of the fortress' inside appointments. One has difficulty in even beginning to comment upon it. Perhaps it is as well to start with one of the pleasant features.

In striking contrast with the remainder of the fortification were eighteen costly, magnificent sets of officers' quarters. These buildings, of highest grade brick obtainable, were masterpieces in building construction. Each was three stories high and 400 feet long. In handsomeness and perfection they have seldom been surpassed.

¹Several did escape, however, during the yellow-fever epidemics, when acting as burial squads.

Each room was made with the finest carved granite and lintels. In spite of the lack of ground available, every compartment was unusually commodious, as well as highly ornamental, thickly plastered, with handsome, arched, wood-carved sliding, drawingroom doors; magnificent sleeping quarters, dining rooms, kitchens, offices, vestibules, closets, pantries, etc. Grandiose fireplaces (which probably were never used, because of the intense heat prevalent in this tropical climate); wrought-iron stairways and balconies, overlooking wide, cement walkways; curved ballustrades and arched hallways; luxurious fittings, exquisite furniture and lavish furnishings—all combined to rival an oriental monarch's palace in richness and splendor. Such were the "grand quarters"—complete in every respect!

Even the barracks for the enlisted personnel (soldiers) were "to be the finest in the world". Quarters were erected for six companies, together with a magnificent hospital, chapel, civilian and servants' quarters, workshops and storehouses, water-cisterns and other buildings—all of them pompous, ornamental and lavishly adorned, fashionable, attractive and as expensive as could be devised.

CELLS—A series of powder magazines (dark chambers) were placed inside the main building. These were lined with the finest grade of lumber. From their sinister appearance there is little doubt that they were available for use as dungeons. Only the smallest amount of air or light-reflection could possibly penetrate even a part of any cell, and that only for a few brief moments during a bright day. At all other times, black darkness reigned within the dreary, foul and solitary dungeons. The 5-foot thickness of concrete-coral-brick wall protected the magazine-cells.

PARADE GROUND—From his elaborately built and gorgeously equipped quarters an officer could gaze wistfully upon a perfectly groomed, sky-covered parade ground. It comprised 13 or 14 of the Fort's total 16 acres. From his balcony—open, as befitted the hot region—he could enjoy the scent of many tropical plants such as hibiscus, cocoanut palms, gum trees, and other growths. Or, from the top of the walls he could gaze far out in the sea, perhaps to observe the sail of a rarely passing ship in the distance. No doubt he wondered what caused it to take this route.

OCCUPANCY¹—Governed with strictest military discipline, Fort Jefferson's forces ruled with an exactness that conformed to its other grim features, a strictness comparable only to that reputed to exist in the French Foreign Legion. To express it mildly the stronghold was ideally suited for confinement. During the Civil War (1861—1864) the Fort, heavily fortified, was the one tiny spot within the boundaries of the Confederacy which remained in Federal possession. It never was occupied by southern forces. It boasted of a "population" (swelled by imprisonment) of about 1600 souls.

OTHER USES—Epidemics, principally yellow fever, combined with its natural isolation, made Fort Jefferson untenable. But it was not until nearly all its occupants were wiped out that it was abandoned. Because of its close proximity to Cuba at the time of the Spanish-American War of 1898 more than a million dollars more was "sunk" in repairs and improvements. Part of this vast sum was for huge coaling stations. These were erected on the left of the Fort's entrance. The natural ship-channel in front of the Fort is deep and wide.

For a short time the U. S. Navy attempted to use the fortress as a penal station. Even for this purpose it was soon forsaken² and not until the World War in 1917 did it again serve. Principally because of the tons upon tons of lead in its casements it was noticed and Fort Jefferson was granted another brief span of life; then the armistice signed its death

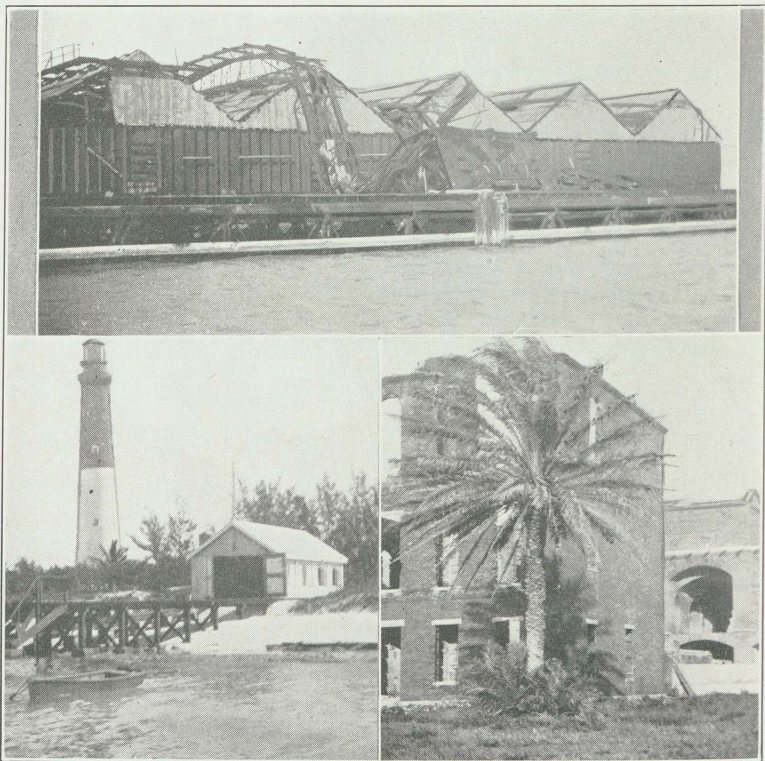
¹Some of the nation's most noted prisoners were its guests—had the drawbridge "lowered in their honor". One such individual was the once prominent and financially successful Dr. Samuel A. Mudd. He arrived at the prison in July, 1865. His crime, it will be recalled, was the setting of the broken leg of John Wilkes Booth, the actor who assassinated Abraham Lincoln, April 14, 1865. For this humane act the medical practitioner, with 7 others, after a trial begun May 19 and ended June 14, were sentenced by a military commission of nine army officers "to be confined in solitary in chains, at Fort Jefferson, 12 out of each 24 hours, without privilege of communication". In obedience to this verdict Dr. Mudd was chained, hand and foot; made to perform hard labor while in leg-irons. At other times he was confined in solitary in his leaky dungeon, suffocating with extreme heat, tormented by fleas and vermin—unable to rest. Later developments proved more favorable for the unfortunate doctor, fortunate for prisoner and soldier alike. During one of the yellow-fever epidemics (two years after his arrival) Dr. Mudd convinced the commanding officer of the desirability of utilizing his medical skill to alleviate the intense suffering. So outstanding were the doctor's services in unceasing attention to the victims of this ravishing disease that the officer recommended a full pardon. Somehow the recommendation was "misplaced"; Dr. Mudd was again put in chains, heavily guarded, and assigned the most menial tasks. For the second time his humanitarian acts brought him misery as a reward. Two more years passed; then the pardon was granted (Feb. 13, 1869) by President Johnson. Dr. Mudd repaired to his Maryland farm, ruined financially, broken physically, disgraced forever. He died 13 years later, Jan. 10, 1883 at age 49.

²The entire Dry Tortugas group was set aside as a federal bird reservation in 1908.

warrant. Its flag was lowered, accorded a final salute and folded.

TODAY'S RUINS—Up to recently, visitors to this tragic place were few. Permission to visit the Fort had to be obtained from the U. S. Coast Guard at Key West.

It is an awe-inspiring sight as we come upon it. The whole appears to be a series of masses of utter wreckage. Walls, roofs, costly ironwork, fixtures, housekeeping equipment and utensils, brick, concrete and cannon, piles and piles of miscellaneous assortments of everything imaginable, are scattered



Top—Part of the additional million dollars “sunk” in repairs was for huge coaling stations erected on the deep and wide, natural ship-channel on the left of the Fort’s entrance . . .

Left—Loggerhead Key Lighthouse—The huge, 70,000 candle-power lighthouse, the wooden dock, the boatshed and walkways, storage house and everything else on the “last foot of Uncle Sam’s domain” are maintained with the care and official dignity accorded all government property. Loggerhead’s neatness makes it a veritable Garden of Eden in its strange, solitary, tropical setting.

Right—The whole conjures up a vision of what was once the most strongly built, thoroughly equipped and completely garrisoned prison-fortress known . . .

and strewn about in utmost confusion. These grim reminders of devastating hurricanes, cyclones and tidalwaves washing over the innumerable junk heaps are twisted, tumbled and enmeshed everywhere—on the parade ground, nearby and beside walls and cells, in and out of building remains. The destruction is complete.

It conjures up a vision of what was once one of the most strongly built, thoroughly equipped and completely garrisoned prison-fortresses known. What we now view, instead of military efficiency, is the most violently disorganized aggregation of ruins—decayed, clewed, collapsed, deteriorated. In complete disorder, everything is broken, lumped together, merged into amalgamations of odds and ends—a strange intermixture of assorted entanglements. They resemble a hodgepodge of miscellany located and scattered in every part, accessible and inaccessible, of the whole. Even the great gun embrasures, coaling stations, warehouses and conveyors with their rusted and tottering steel girders, iron roofs, supports and walls are smashed, twisted, torn and entwined into compact masses to the extent that the component parts are hardly recognizable.

Modern pirates have succeeded in stripping and removing every loose thing which was not solidly embedded in, or consolidated with the ravaged and crumbling walls, or unmovable piles of grim leavings fused in the heaps of wreckage.

MARKINGS—Like buzzards picking at a carcass, this forsaken, torn and tangled havoc and desolation is carried still further. Small wonder it is that the occasional trespasser (who comes here to fish, not seeking adventure otherwise) is haunted and “scared stiff” by the continuous rattling of huge girders hanging in space. Scornfully these lash the tottering, threatening structures in obedience to the fury of the winds.

Nor is that all. Cartoons, inscriptions, caricatures, nonsense, initials, symbols, signs, characters, twaddle, remarks, numbers, well-meaning pious warnings, truisms with jargon and jabber, along with designs of every color and shape have discolored and adorn the massive ruins. These are ingeniously and whimsically written, daubed, scribbled, painted, cut, scratched, stenciled and traced, chisled and otherwise evidenced and exposed on every lot of grotesque entanglements, surface,

wall, piece of equipment or junk-heap and wreckage in and around the Fort, from top to bottom, inside and outside.

Never, anywhere, at any time did such a meaningless collection of names, dates, places, figures, symbols, subject-matter, thoughts, drawings and miscellaneous writings become so assembled. Were it not for the tragic history and final disposition of the remains of Fort Jefferson the whole could be referred to as comical in the extreme. (See President F. D. Roosevelt's proclamation, Jan. 4, 1935, at the end of this chapter.)

EVER-CHANGING MOODS—These weird, mocking, jesting markings and inscriptions blend with the tempest's sudden and violent storms of wind which prevail here. Without warning—almost out of the usual clear sky—hollow shriekings and terrible sounds rend the air and burst suddenly upon one's ears. Sheets of fire, followed by horrid, tropical thunder, and torrents of violent rain, cause the gulf seas to grow, swell and foam with rage. All this and other uncertain, sinister forebodings warn humans they have no place and are unwelcome in this ghastly area. Evidently, there is plenty of foundation for popular legends which inform us that in the dark of night, sounds resembling clanking chains and agonizing shrieks chill one's blood. Could this be from ghosts of suffering victims whose wretchedness and anguish were relieved by their becoming insane?

MYSTERY GRAVE—Before turning from the desecration, weirdness, isolation and woe of the waterbound, amazing achievement which is Fort Jefferson still another grim fact rears itself for observation and contemplation. It performs the mission of continuing, indefinitely, the legends, mystery and the suffering implied in tragedy and misery of this blistered, feverbitten key. The whole is shrouded in catastrophe and agony, in veritable disaster, from its inception. It appears on Garden Key's fortress enclosure.

Standing erect in the shape of a crude wooden-cross, almost alone, is a silent grave sentry!

It adorns the otherwise once famous parade ground. Near it are a few other graves elaborately indicated by headstones. The passing of time and ruinous elements have joined to erase all indications of whose bones are interred in this solitary place of burial. Our blood runs cold through our veins as we gaze and wonder at the deep, unsolved mystery we now observe.



MYSTERY GRAVE ON GARDEN KEY
(in the parade ground at Fort Jefferson)

WHO, pray inform us, is it that, for reason as mystical and beyond human explanation as it is CERTAIN . . . Who or WHAT is responsible for placing the flowers—FRESH flowers—on this sacred place of interment, this grave of mystery? Whose ghost is held in such reverence? Is it a ghost, an apparition or a fairy?

Almost identical pictures as the one shown in this book of the "Mystery grave" in Fort Jefferson's parade ground have appeared in other publications, e. g., *The Saturday Evening Post*, July 31, 1926; *National Geographic Magazine*, January, 1927.

When the author visited the Tortugas group and stumbled on this plot, its freshly adorned flowers attracted attention. As a result the photograph accompanying this reference was unconsciously taken. The hidden enigma and curiosity it held was not discovered until later. Efforts to trace the source of the conspicuous flowers failed.

For an unknown period of years past there comes, through the perilous, swirling tides, braving terrible tempests, through one of the ship channels to this despoiled, abandoned spot—What?

The unknown visitor's *purpose* is definitely known—nothing more: a silent tribute, constantly renewed, to the memory of someone dearly beloved! Flowers! *Fresh* flowers! Always found adorning this crudely-marked grave plot! All who care may come and see.

Who, pray inform us, is it that, for reason as mystical and beyond human explanation as it is *certain*, with regularity that defies imagination,—who or *WHAT* is responsible for the placing of fresh flowers on this sacred place of interment, this grave of mystery?

Whose ghost is held in such reverence? Or is it a ghost, an apparition, or a fairy? Many have conjectured. The mystifying tales have become legend. The inexplicable fact remains unsolved. At night why does it haunt those who remain in or near the Fort? Worse, why does it persist in lingering in the minds of those whose eyes have once beheld the visible specter?

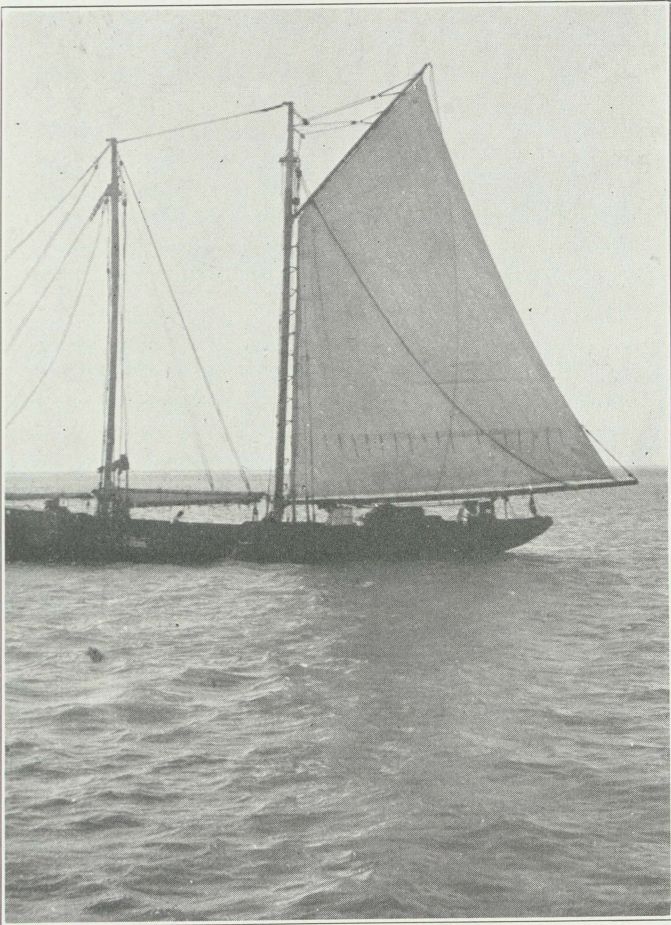
BIRD KEY¹—Why was not this body consumed in the lime-pit at Fort Jefferson? That was the final resting-place of many others who suffered and died here. Why was this particular corpse buried *inside* the Fort—in the Parade Ground? The distinguished few whose remains were deposited nearby are identified by monumental stones of size and quality befitting this honor—why is *this one* indicated by the mere simplicity of a wooden symbol? Why was it not consigned—like hundreds of others—to Bird Key?

The more questions asked the more baffling and significant this obscure, unfathomable rite becomes—until it preys on the mind in the nature of mystagogy.

Even the skipper-captain stands offside, head bared. Why

¹BIRD KEY—So designated because it is the nesting place of thousands of screaming sea birds, sooty and noddy terns, who come many miles to hatch their eggs and rear their young. It is $\frac{3}{4}$ mile southwest of Garden Key, and is being put under control of the National Park Service (see Presidential proclamation, end this chapter).

During the yellow-fever scourge of 1867 this tiny island, in spite of its complete barrenness, was used as a huge cemetery. Hundreds of the victims of the pestilence—swift and fatal disease—guards and guarded alike, were hastily and unceremoniously buried in the sand on Bird Key within a half hour after their bodies were cold. This meagre sand-bar's mission was to receive their remains. Immediately upon being deposited there great flocks of birds gathered to feast upon the corpses.



. . . And what is the mission of those ruffians aboard that old-fashioned schooner? Are they corsairs, buccaneers, brigands, hidden treasure-seekers? Why does their craft show no sign of life during daylight, but when night falls the vessel becomes alive . . . Why are they at tragic Fort Jefferson?

does he refuse to come near the spot? Strange, too, he evidences a dislike even to discuss it. Why? What makes him conceal himself in the shadows, moving rapidly—as though he is pursued? Is it his shadow or *something* following at his rear?

MYSTERY CRAFT—And what is the mission of those strange-acting individuals aboard that old-fashioned schooner? Why is it anchored in the channel fronting the Fort? What brings *them* here? Why are they in the Tortugas Islands? Why does their craft show no sign of life during daylight, but when night falls the vessel becomes alive with vicious-looking, bare-foot, bearded ruffians? What special advantage and activity causes them to move about—hastily—in utter darkness? We have noticed they are not here for fishing; then what other duty or inducement brings such an assemblage of hardened crew—now-a-days—to this place of misadventure, ruin, pestilence, premature death? After having commenced their work—whatever its nature and purpose—in the dead of the night, why do they abruptly cease labors just before sun-up? Are they here to further pillage and rob the remaining debris?

Are those aboard remnants of once jolly wreckers, pirates, smugglers and cut-throat buccaneers? Before the erection of Fort Jefferson the Tortugas islands saw booty-plunderers and sea-robbers and their ilk assemble in high revel. Stirring tales of weird and remarkable adventures, of darkest legend and fact, are told of daring forays and oceanic raids. These hidden anchorages were favored refuges. A wealth of pirate-treasure is said to be buried within the confines of Garden Key, somewhere in or near the Fort. Have they learned of the eighty-million pieces-of-eight? Do they possess some secret that



A SPANISH "PIECE OF EIGHT"

(from a coin in the cabinet of the Massachusetts Historical Society)
Value in 1914 about 4 shillings, 2d (approximately 80c). Also called Spanish
piaster or hard dollar.

gives them knowledge of its probable location? Perhaps! It may be the reason for their enigmatical, baffling efforts

What connection has this strange crew at Tortugas with the *MYSTERY GRAVE*?

Why has not the Lighthouse Keeper at Loggerhead Key (70,000 candle power) discovered their transgression? He could radio-communicate to the U. S. Coast Guard at Key West, the guardians of these coastal waters and the Fort, that an unauthorized vessel and pillagers are sighted.

Is it safe to offer them some of the hundreds of Barracuda which we are daily catching in front of the dilapidated docks and immediately releasing? Will they offer us some "aguardiente" (a corruption of the Spanish "fire-water"—sailors' rum) in exchange?

* * *

LOGGERHEAD KEY¹—Broward, our navigator, the skipper's son and our ship's only mate, he who is of 2d buoy fame, too, warns us to "leave this place before it is too late". The winds blow constantly from the east, making return to the Florida mainland extremely difficult. What hidden meaning—if any—did his last few words convey? Did not our guide captain himself remark that he would consider it a calamity if we were to be held in this harbor by a sudden "blow" (hurricane)? Then why do we tarry?

"Hoist anchor, Sir! All on deck! Away! Let's get out of this infernal region while weather conditions, at least, permit". We will pay our respects, briefly, to Lighthouse Keeper Sawyer, brother of our skipper. His hermit-like life is contentedly spent 3 miles away from the Fort, on U. S. Government operated Loggerhead Key. It is the very last foot of ground in the great territorial limits of the U. S. A. At least, in a measure, we should feel safer there.

As we tie up at the lighthouse wharf we cannot help but observe this island is in great contrast with the desolate scene

¹LOGGERHEAD KEY was named for the loggerhead turtle (caretta caretta), a carnivorous marine species of tropical and intertropical seas. They visit sandy shores and deposit eggs on the beach.

It was the scene of J. Fennimore Cooper's story, *Jack Tiger*, the hermit lighthouse keeper at Tortugas. An excellent account of the history, romance and tragedy of Fort Jefferson is contained in A. Hyatt Verrill's *Romantic and Historic Florida*, (publish by Dodd-Mead & Co., 1935).

The U. S. Lighthouse Board gave the Carnegie Institute of Washington permission to establish here (1904) a marine biological laboratory, and much scientific work has been accomplished on this key.

we have just left. Here, at Loggerhead, everything is in an excellent state of preservation. The whole is most attractive in appearance. It abounds in man-cultivated, numerous, well-attended tropical plants, vegetation, and those things calculated to add to man's comfort in this seclusion.

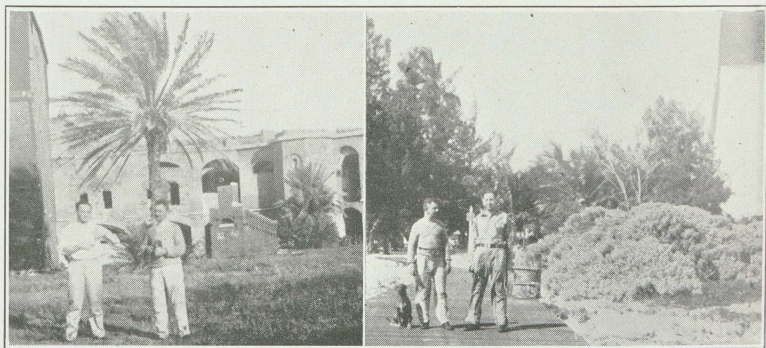
The Keeper's two-story house is strong, of brick construction. It seems fully capable of withstanding hurricane and tidal-wave. In size it is ample, radiant with fresh white paint, equipped with many conveniences and fairly well furnished.

As with everything else about the place, the walkways are clean and orderly. "Elbow-grease" is plentifully in evidence. The wooden boatshed, dock, storage house, lighthouse, marine biology plant, etc., are maintained with the official dignity accorded government property in all national parks. Loggerhead's neatness makes it a little Garden of Eden in its strange, tropical, solitary setting. This tiny island with its one-man attendant is a welcome relief after our ghastly experience at the Fort.

* * *

. Our provisions are low and cannot be replenished. We must make a dash for Key West at the earliest possible moment.

Farewell, Tortugas, Isles of Mystery!



Left—The barracks for six companies of soldiers were to be "the finest in the world"

Right—Author with mascot and "Admiral" Sid Jacobs on Loggerhead Key. It is well attended, in complete contrast with the abandoned Fort on neighboring Garden Key.



ON JANUARY 4, 1935, President Franklin D. Roosevelt gave the romantic and picturesque old Fort the official status of a National Monument.

Coincident with his proclamation, repair and construction gangs are being sent to the site to rebuild it to a sound state and remove the evidences of decay, injury and destruction. The grim fortification, with its parade ground, on Garden Key is to be restored to its former trimness.

The U. S. National Park Service states that transportation by water and air will be arranged for those who wish to visit the Tortugas monument from Florida points. Facilities to accommodate guests overnight are also part of the Park Service's plans to feature it.

FORT JEFFERSON NATIONAL MONUMENT—FLORIDA

A Proclamation

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

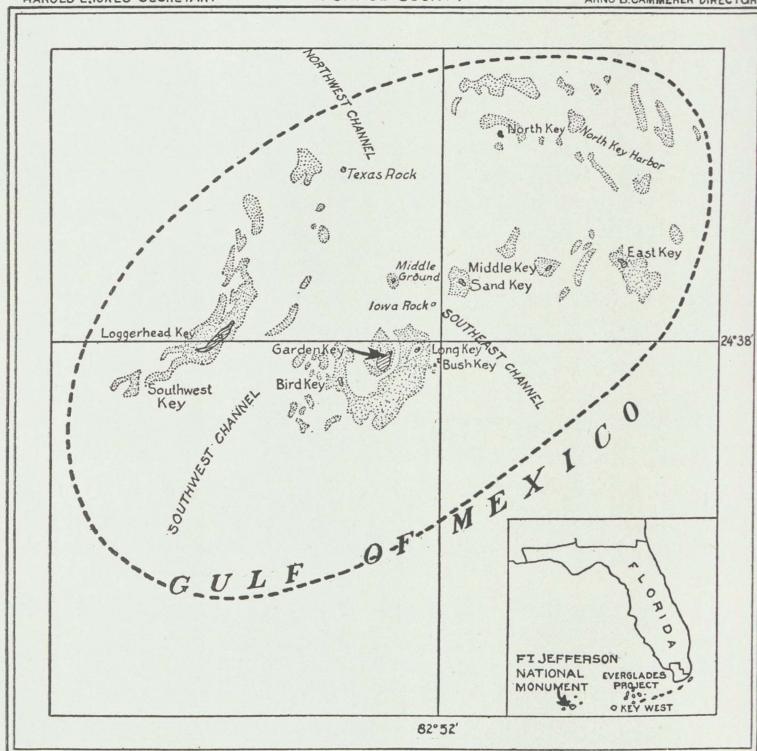
WHEREAS it appears that the public interest would be promoted by revoking Executive Order No. 779, of April 6, 1908, creating the Dry Tortugas Keys Reservation; and by revoking (1) the Executive order of September 17, 1845, creating the Dry Tortugas Military Reservation, insofar as it relates to the Dry Tortugas group of islands, and (2) Executive Order No. 1613, of September 23, 1912, insofar as it closes the harbor of Tortugas, Florida, to navigation, and (3) Executive Order No. 5281, of February 17, 1930, insofar as it forbids air navigation over the said harbor; and by including the Dry Tortugas group of islands within a national monument for the preservation of Fort Jefferson and the historic and educational interest contained in such area:

NOW, THEREFORE, I, FRANKLIN D. ROOSEVELT, President of the United States of America, do hereby revoke the aforesaid Executive Order No. 779, of April 6, 1908; and I do hereby revoke (1) the aforesaid Executive order of September 17, 1845, insofar as it relates to the Dry Tortugas group of islands, and (2) Executive Order No. 1613, of February 23, 1912, insofar as it closes the harbor of Tortugas, Florida, to navigation, and (3) Executive Order No. 5281, of February 17, 1930, insofar as it forbids air navigation over said harbor.

DEPARTMENT OF THE INTERIOR
HAROLD LICKES SECRETARY

FLORIDA
MONROE COUNTY

NATIONAL PARK SERVICE
ARNO B. CAMMERER DIRECTOR



FORT JEFFERSON NATIONAL MONUMENT

And under and by virtue of the authority vested in me by section 2 of the act of June 8, 1906 (34 Stat. 225; U. S. C., title 16, sec. 431), I do proclaim that, subject to all existing rights and to the existing reservation for lighthouse purposes affecting a portion thereof, the area indicated on the diagram hereto attached and forming a part hereof is hereby reserved from all forms of appropriation under the public-land laws and set apart as the Fort Jefferson National Mounment.

Warning is hereby expressly given to all unauthorized persons not to appropriate, injure, destroy, deface, or remove any feature of this monument and not to locate or settle upon any of the lands reserved by this proclamation.

The Director of the National Park Service, under the direction of the Secretary of the Interior, shall have the supervision, management, and control of this monument as provided in the act of Congress entitled "An Act to establish a National Park Service, and for other purposes", approved August 25, 1916 (ch. 408, 39 Stat. 535; U. S. C., title 16, secs. 1 and 2), and acts additional thereto or amendatory thereof.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States to be affixed.

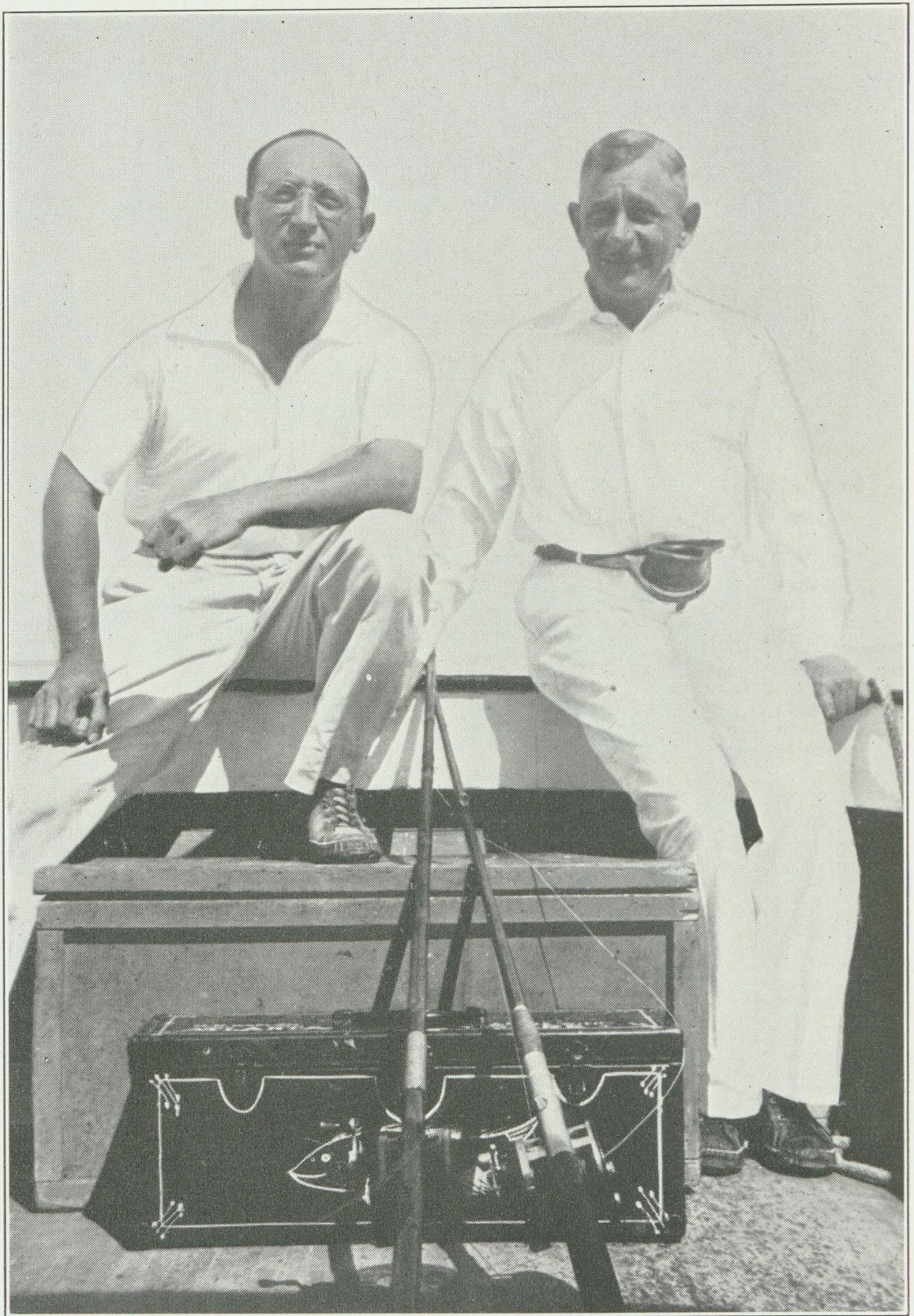
Done at the city of Washington this fourth of January, in the year of our Lord nineteen hundred and thirty-
 [SEAL] five, and of the Independence of the United States of America the one hundred and fifty-ninth.

Franklin D. Roosevelt

By the President:

Cordell Hull

Secretary of State.



Judge Herman Goldstein

The author

"Being I have now rested myself a little, I will make you some requittal by telling you some observations".

—IZAAK WALTON, *The Compleat Angler*.

CHAPTER FOUR

The Spanish Main

*My ventures are not in one bottom trusted;
Nor to one place.*

—Merchant of Venice, Act 1, Scene 1.



CONVERSATIONS aboardship on deep-sea fishing ventures are often intensely interesting.

We now discuss the backwater areas, surrounding us for leagues in every direction. In the nearby, windswept, blue Gulf Stream, the Gulf of Mexico, and the Caribbean Sea were committed the most daring and ghastly deeds imaginable. In bygone days the hidden coves in the 10,000 Islands and Florida Keys were the natural haunts and hideaways of infamous, vicious sea-gangsters. It was a comparatively few years ago; nightly these places are still haunted by ghosts of roving mariners of yore!

The entire region was part of the notorious *SPANISH MAIN*! It is a historical link in the life of early America.

For several hundred years before the construction of the Panama Canal these waters were part of the busiest sailing-circuit of travel, transport and conquest in the newly discovered Western Hemisphere. It was the route between European, Oriental and African ports for shipment and transshipment of immense cargoes and treasure, from and to the colonies planted by Spain.

Proud, well-fitted galleons of once mighty Spain, manned by bearded dons, sailed courageously and proudly through the waves to the new world. Merchant-ships, heavily laden with cargoes of necessities and luxuries—supplies of every description, for every purpose, from home (Spain) and oriental bazaar—were outfitted and navigated to the mainland ports of the Americas.

Originally their mission was to fill the depleted Royal Treasury, exhausted by wars and the forced flight of her expelled

Jews and Moors. It followed Spain's priest-directed, brutal Inquisition and Expulsion (1492).¹

Hundreds of once prominent priestly compatriots, ruined financially by the Inquisition, again took advantage of their clerical garb. They caused the rumors of nectar and gold to become so magnified that the entire population looked with eager eyes and a ray of hope across the sea. Was not the New World Spain's, exclusively? Why not restore their own personal fortunes by controlling trade and commerce with the colonies?

The idea immediately took root. Trade was to be developed to bonanza rank. Exaggerated tales were spread of fabulous wealth, unsurpassed beauty, ideal climate and leisure life; and of adventurous and profitable deeds in the New World. The year 1584 saw a great influx of Spanish missionaries to Florida.

Soon overseas supply ships, merchants, vendors, chandlers and trading parties found themselves unable to furnish the varied requirements of all the colonies. The greedy crown advisors were not satisfied with their liberal share of the tremendous profits. In the name of the sovereigns they set out to command more by sordid and lusty monopolistic deals. Ships were dispatched to ports in Africa to secure loads of native blacks which they sold through slave-mongers to plantation owners.²

¹Queen Isabella invoked policies of State administration which met the whims and fancies and dictatorial approval of the Papacy in addition to her own. Authorities describe the result: "Upon the helpless victims were heaped indescribable mental and bodily tortures. The kingdom soon became drenched with the blood of innocents. Under the guise of religious doctrine (fanaticism) the Spanish court was surrounded with the most ignoble and greedy lot of Noblemen-Priests imaginable. Each grabbed what he wanted of the power and wealth made available through the medium of the dead weight of medieval barbarism. In 1492 came the Expulsion. The people who built up the trade and commerce, who developed and financed Spanish industry, who brought it culture (described by McCabe) as resplendant as it was grandiose, were driven from their homes and land (to locate temporarily in such retreats as they could find). Soon after, the rulers began to feel the effect and grave consequences of their 'holy act'; trade and industries ceased. The end of the century marks the finis of Spain's Golden Age—from a great world-power her downward curve parallels the downfalls of Egypt."

The "Holy Mission" performed, the ruling classes turned their attention, with characteristic covetousness, to the brave contenders for a share of the trade with the settlers in little known American ports. To enlarge and improve her sea commerce Isabella was induced to give handsome premiums and subsidies for large merchant ships. At the same time smaller ship-builders and owners were penalized and heavily taxed. As was planned, it resulted in the construction of immense galleons or trading vessels.

Thus, directly or indirectly, as the case may be decided in your mind, the evidence seems clear, parts of the United States, notably Florida, Texas, California, etc., as well as the West Indies and South American countries owe their existence (or at least their being opened to white civilization) to the consequences of the Spanish Inquisition and Expulsion.

²One of the chief Spanish profiteers in these commercialized slave practices was King Philip V. With Anne, Queen of England, (1665-1714) he owned one-half of a syndicate organized at the height of the slave-trade period. His henchmen contracted in their King's name to deliver 4800 blacks as slaves for the increasing number of settlers. A royal, shining example!



SPANISH GRANDEE

Following Spain's priest-directed, brutal Inquisition and Expulsion of 1492, . . . to restore their own personal fortunes they sent picturesque and mighty frigates of an earlier day across the great sea on ventures of trade . . .



. . . where all ships voyaged in constant peril of becoming pirates' booty . . .

To supply her increasing colonies brave, stout-hearted sea-merchants lavishly equipped the mighty and picturesque frigates of an earlier day with the luxury and wealth of nations; holds of galleons were laden deep with richest cargoes of assorted merchandise and valuables. These they meant to exchange for American rarities and island products.

The inability of the Spanish caravels and explorers to furnish the huge requirements for all the settlers presented serious problems, both at home and abroad. Other sea-faring nations gazed longingly upon the vast possibilities for commerce with the "Americanos". To prevent outsiders from sharing any part of this rapidly increasing, highly lucrative commerce, ministerial counsellors again resorted to typical, insolent, impudent, oppressive measures.

EDICTS—For three centuries (almost to the time of the Spanish American war, 1898) administrative applications, rules, laws, decisions, edicts, "autos", regulations, directions, royal "cedulas", ordinances, "letters of marque", provisions, instruments and instructions—every form, request, command and order that could be devised—were published, dispatched or carried for communication in any manner possible to the conquistadors or colonists.

These directions and instructions applied with equal force and effect to colonial advice, settlement, conditions, trade, expansion, life, liberty, property, habits, customs, sustenance, African slave-traffic, "commendations" (a system of patronage or modified slavery), the spread of discovery, administrative areas, forts, divisions, sales or grants of land, raparian rights, the military and everything else.

All emanated in the name of, if not directly from the crown; but originated as the result of special desires of zealous ministers, the Papacy, or anyone else with the slightest semblance of authority, either within the empire at home or at the scene of colonization, exploration or conquest. So manifold and typically harsh were these edicts and regulations that, taken together, they amounted to strangulation rather than regulation of colonial, political, religious, civil and military life, economic and commercial principles and practices included. In tone and effect each was promulgated and enforced, whenever possible, with severest dictatorial measures. Had not the

Spaniards learned during the centuries preceding how to invoke such policies?

BUCCANEERS (Pirates)—Spain's restrictive system of laws could have but one result: Because of the exorbitant charges made by Spanish vendors, ships of other nations (English, Dutch, French, Portuguese, Swedes, Danes, Courlanders, etc.) increased their efforts. They furnished the goods and supplies for fractional amounts; and united in their opposition to the special "protective laws and decrees". All efforts of the Spaniards to curb, apprehend and punish them proved unavailing. Unhampered by the unenforceable "crown's rights" fresh cargoes of valuables were dispatched with regularity in the ships of many flags. The *Spanish Main* became alive with them.

These numerous, wealthy oceanic treasure caravans soon became easy objects of attacks by bands of high-seas robbers. Freebooters from the colonies and distant places were attracted. The very waters we now cruise became infested with pirates. In the wake of gallant supply ships flashed strange, buccaneering craft! They became the scourge of the *Spanish Main* and Spanish-American trade.¹

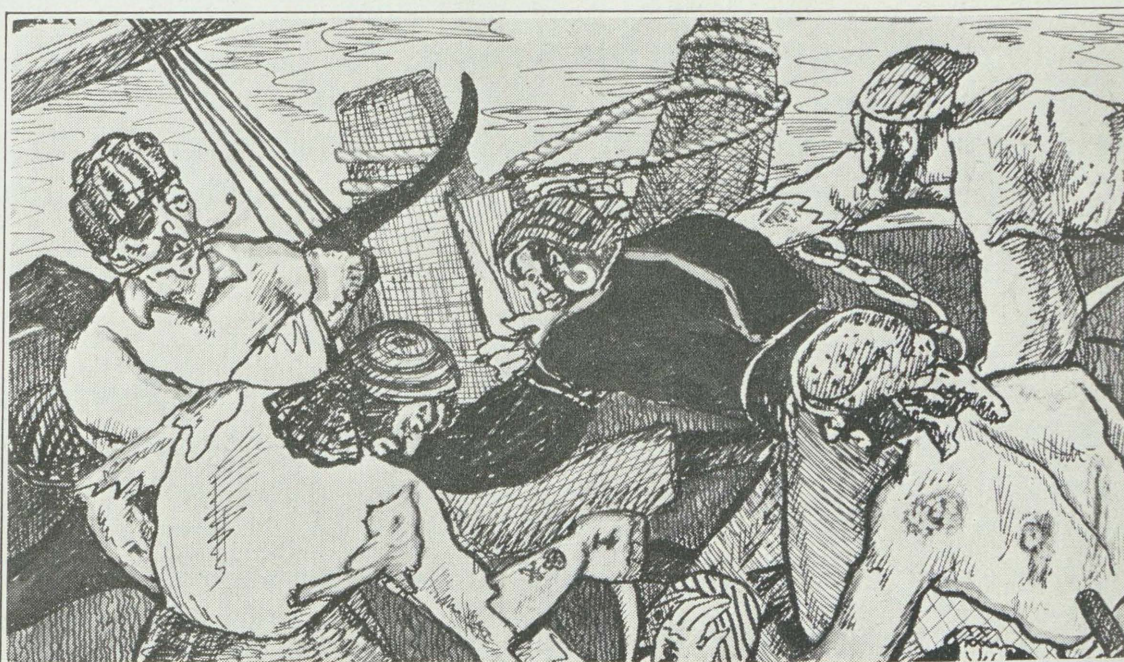
Rakish brigs and stately galleons! Some with ornate gilt-carvings! Lofty masts; full rigging taut! Sails blowing hard on the island curves! Fresh from central west coast of Africa,—slave-driven ships—having bartered their vessel loads of calico and lesser inducements for a hold full of naked blacks to sell to hordes of buyers in crowded American slave markets!

Strange and glamorous pageants across the pages of history! Some flaunted the black flag of piracy—the skull and cross-bones! Others displayed a white skeleton on a black background which could be seen easily at a distance,—the chief object of which was to strike terror to all beholders!

Upon their decks bristled tiers of cannon to back up greedy exploits! Commanding were experienced men who had navigated many seas. Their envious ears heard tales of the *Spanish Main*!

Captain Ed Teach ("Blackbeard")! Ambrose Cowley, the first American pirate, navigator of the ship "Revenge"! Sir

¹The reason for bulk shipments of gold and silver was that all trade had to be carried on with precious metal—no checks, drafts, foreign exchange like we have today, were used.



PIRATES—Adventurous oceanic assassins, cut-throat brigands, swarthy, fierce-looking, roistering sea-rovers, some with great welts on their bodies and heads swathed in crimson kerchiefs . . . unkempt wretches who cruised far and wide, stripping, plundering, burning peaceful merchant-ships . . . Men who knew no God, held no fear . . .

Henry Morgan, many-sided sea-pillager who retired into official dignity! Sir Francis Drake¹, pirate of seven seas! Captain William Kidd, (1650-1701) the Scottish navigator and reputed American pirate, of whom it is said he was no pirate but the victim or scapegoat of political intrigue! Condat! Vance!

¹DRAKE (1545-1596)—In 1570 he obtained a regular privateering commission from England's Queen Elizabeth; embarked on a cruise in the Spanish Main and created havoc amongst Spanish shipping. His ships filled with plunder, he bore away for England, arriving at Plymouth Aug. 8, 1573. In 1578 he voyaged along the coast of Chile and Peru "taking all opportunity to seize ships until his men were saturated with plunder"; then he cruised along American shores . . .



CAPTAIN ED TEACH (commonly called "BLACKBEARD")

(From a rare engraving in the Harry Elkins Widener collection, Harvard College Library. By special permission of Charles F. Dow, Esq., "The Marine Research Society").

This picturesque English pirateer, later pirate, "took for himself 14 wives, none of them willing, albeit he was the mildest-mannered blackguard who ever scuttled a ship or slit a human throat".

Teach was killed Nov. 22, 1718, in a hand-to-hand conflict with Lieut. Robert Maynard of H. M. S. *Pearl*.

"Blackbeard's" right-hand man was a negro pirate called Caesar who sought refuge in a creek a few miles below Miami; for him the name "Caesar's Creek" was given it. This black despot was captured and hung in Virginia during the same year his master was killed.

and a host of others, such as Hawk, Hawkins, Billy Bowlegs, Calico Jack, Jose Gaspar¹, etc., forever plotting, scheming, robbing.

These ships were manned by adventurous oceanic assassins, originally king's men, now pirates, alternating as the mood or occasion offered. Some were herdsmen who abandoned their masters' flocks; others ceased attending missions, where they heard mass, to engage in careers and deeds of banditry. A few had been explorers and pathfinders, dons of noble blood, courteous, highborn, chivalrous even to conquered victims, carrying letters of marque (which did not restrain them from abusing their commissions). The whole formed a background of arrogant power!

They were polyglot swarms and gangs of fierce-looking, swarthy, roistering fellows—benign despots, fighting through clenched, jagged teeth. They showed themselves to be a dirty, sullen, hard-bitten rabble. Their mutilated faces were heavily bearded, bodies scarred, with great welts on hairy arms and legs, and frequently a limb missing! Crooked physically and mentally! They wore short, wide-striped pantaloons, with coarse shirts which opened at their throats down to the waist, their heads swathed in crimson handkerchiefs or East Indian bandanas. A few affected golden hoops in their ears; sweaty, grinning, unkept wretches, merciless, dark-skinned offspring of Asiatic-Europeans mixed with blacks. This lot were capable of applying the most abominable, medieval tortures—men who subscribed to the principle "no prey, no pay". They muttered vile, unprintable jests and curses while excelling in deeds of wanton cruelty. To make their land or sea-captives (who remained silent through fear, or had no spoils to declare) reveal hidden treasure, they were hacked, twisted and slashed with knives, swords, spears or any weapon available or selected according to individual taste. Frequently a toss-up of a dubloon determined whether a victim would be allowed to be burned alive in wooden spits, or merely have his heart pierced by sword or short-arms.

¹JOSE GASPAR (OR GASPARILLA)—He assumed in all seriousness the title of "King of Pirates" and ruled in kingly style on Gasparilla Island, Charlotte Harbor where he built his fort and "Royal" Palace. In 1801 he captured a Spanish treasure ship with ten million in bullion and coin. A Spanish princess was taken with the loot—she repulsed his amorous advances, so he put a bullet into her heart. In 1821 he himself was attacked by pirates and committed suicide.



SIR HENRY MORGAN

A noted buccaneer in his day (born 1635?—died 1688). Sold into slavery for work in the Barbadoes . . . somehow he gained his freedom . . . became an adventurer, then pirate . . . In Cuba 250,000 "pieces of eight" and a great amount of other booty-treasure was divided by him amongst his crews . . . then he bilked his shipmates no less than he plundered Spanish ships, without remorse . . . Found guilty of black piracy and worse on the high seas he was taken prisoner and tried in England . . . With ill-gotten gains he bought his freedom . . . and with more buccaneer's gold he managed to become knighted by King Charles II (1630-1685) "of dark memory" . . . Morgan returned to the scenes of his infamy as Lieut. Governor of Jamaica. There the many-sided sea-pillager retired into official dignity . . . And set about the business of hanging on Gallows-Point as many of his former adventurous oceanic assassins as he could lure ashore—his object lesson in "do as I say, not as I do."

With the growth of the nefarious, sea-bandit communities their activities became bolder. With the peace of 1815 a fresh batch came; these were war-experienced adventurers. They infested the entire region.

They constituted a collection of murderous brigands, riotous hordes of gruesome, veteran bone and law breakers. Crews

drunken with St. Croix and Cruzan rum, commanded by daring sea-captains! Men who knew no God, held no fear! All did their masters' bidding under penalty of themselves being put in chains until convenient to be dumped overboard, but not before being tied to the mast and shot, tortured and mutilated; perhaps, left ashore to perish and die, without ceremony or conscience.

Of each and all of them there is bald, historic fact and legend. In their lust for pillage they cruised far and wide, stripping and burning peaceful merchant-ships. Following thundering cannonades, blood spilled freely in the hand-to-hand conflicts. Throats were slashed unmercifully; decks littered with the writhing corpses pitched overboard until the surrounding waters ran red with human blood. Whole ships' crews were foully and inhumanely butchered with as little concern as though they were but the unwanted ventrals of fishes; then the whole lot of helpless, tortured, dying humans would be fed to savage barracuda and hungry sharks.

No cruise was considered complete until the swaggering, piratical lot had taken what they considered sufficient plunder. A single share might easily consist of a varied assortment of pieces-of-eight, beads, wool, packets of pearls from the hatch, jars of civet or ambergris, boxes of marmalade and spices, casks of strong drink, bales of silk, trinkets, seeds, rolls of cloth or pale blue cotton woven by Indians in Peru, sacks of chocolate or vanilla, jar of wine, chest of swords, knives, silver-mounted pistols and daggers, chased and inlaid gold and silver plate, bars of silver, watches, trinkets and uncut jewels, necklaces, heavy carved-furniture, delicately cut glass, packets of emeralds from Brazil, medicinal gums, precious paintings, goat-skins filled with bezoar stones, beef salted and boucanned, maize, tobacco, axes, rum, sugar, plummed hats and a multitude of things. The first moment the anchor held, the spoils were divided at the main mast.

After robbing the trading vessels the cut-throat brigands clipped on more canvas and fled. Behind them were ravished hulks, sunken ships stripped of treasure and human life. In their haunts the marauders, resting, planned a new series of foul deeds while hiding from outraged justice.

From 1650 to about 1850 piracy reigned supreme.



CHART SHOWING THE WEST INDIES ABOUT 1720 with "TRACTS OF THE GALLEONS"

(From Herman Moll's "ATLAS MINOR", London, 1772, in the Harvard College Library. By special permission of Charles F. Dow, Esq., "The Marine Research Society".)

The brilliantly colored waters of this part of our fishing expedition have seen more horror than any like stretch the world over. The fathomless bottoms remain a sealed volume of mystery, fierce adventure, fact and legend. Below us are a thousand sunless wrecks; alongside them may be an array of dead men's skeletons amongst heaps of treasure, hideous and gruesome with the sight of ugly death and disorder.

FISHERMAN'S BOOTY—Unlike the buccaneers, marauders, sea-pirates and oceanic cut-throats, we do not seek these hidden recesses and off-channel routes to plunder and escape justice. For us, the once principal trade routes and isolated hideaways of this Godless, blasphemous lot (when they were not roving in search of additional spoils) are today entirely free from human habitation.

We have left "civilization" because *it*, now, smacks of such piracy, disguised under the name of "commerce". It is our intermission from the knaveries of trade which we temporarily escape. Our aspirations are honorable and lofty. Our mission is to seek the beneficial influence of the balmy, salt-air. We have come here, primarily, to exercise our talents in the glorious activity of deep-sea game-fishing, to battle with those oceanic creatures who, singularly enough, have become contaminated with pirating activities in their own, peculiar manner. Our lures (baits) are the treasured-plunder sought by these finny despots.

We cruise these parts and find them untroubled. The stillness and silence of the ghosts of ones long since dead, sailing their sunken brigs in "Davy Jones locker" do not disturb the harmony and peacefulness of our sun-kissed surroundings. It is known that their well constructed hulks travel about, due to oceanic currents which move them great distances—a constant menace to navigation. But in practically all cases our Geodetic & Coastal Survey sailing and inland-water charts mark the exact locations of these submerged ship-ruins.

These are our good and sufficient reasons for sojourning in these seldom-traveled aquatic by-ways. We engage in the sport of fair combat with the pillagers of the deep (fishes), the only life now taking refuge in these secluded solitudes. Our prizes and captures shall consist of rich experiences, of marvelous adventures, of thrills galore, with beneficent reactions.

CHAPTER FIVE

People of the Sea

"And the Spirit of God moved upon the face of the waters."—Genesis.

LIFE IN THE REEFS—Oceanic Royalty—Crusaders.

FISCATOLOGY (SCIENCE OF FISHES)—Definition—Fish Distinctions—Habits and Influences—Tropical (Florida) Waters—Fish Migrations—Depth—Hunting Tribes—Leviathans—Crustacea—Mariposes.

BUILD AND BODIES—Coloration—Head—Teeth—Hearing—Speech—Eyes and Sight—Taste and Smell—Touch and Feeling—Foods and Prey—Digestion—Food Qualities—Fins and Motion—Swim Bladder—Scales—Heart—Circulatory System and Respiration—Measurements—Weights—Formula for Arriving at Fish's Weight by Its Measurements.

WHAT MAKES A FISH STRIKE?—Nuisances—Fish Temperament—Strategy Action.



OUR PURPOSE is leisurely to enjoy ourselves on our fishing journey. So we pause for a brief glimpse into the marine abyss surrounding us. Its matchless wonders proclaim it to be the special exhibition of Holy Fingers.

Underwater scenery never fails to touch something deep in a devout fisherman. To him it is fascination without end. Perhaps, this is because man has part of the sea in his own blood.¹ He likes to comprehend not only the Deep's inhabi-

¹LIFE'S ORIGIN—Biologists have analyzed blood and sea-water. In both they have found, not only the same kind of watery fluid but also the same salt-content—even in substantially the same proportions. (The saltiness of the sea is 5½ pounds salt-material to each 100 pounds of sea-water). From this, conclude scientists, saltwater is the mother-medium from which blood is descended.

Further, scientific authorities claim all life of every kind began in the salt-sea or sea-slime; that originally all bodies (humans and animals and birds) were first fish-like in form; that as the seas receded these early-world creatures were trapped in lagoons, bays, estuaries, etc., or trapped on shores and gradually—during the course of millions of years—were turned and twisted and adapted to fit a life on land. (See exhibit, "Face from Fish to Man", from American Museum of Natural History, next page). A good example is to observe the polar seal in a zoo as it turns and twists its body in its effort to move across snow and ice packs.

Geologists, also, have proven that fishes were the most ancient kind of life—the most primitive of which science has any definite knowledge. Fishes, they tell us, were the oldest vertebrates known. Their line is traced back to the prime *Ordovician Age* (the Paleozoic or Ancient-Animal era)—the period in geology estimated at 360 million years ago, when great rock and land areas emerged. Fish remains (fossils) have been found in the rocks of that era, leaving a lasting record, plainly written for those who know how to read and interpret it.



(Courtesy American Museum of Natural History, N. Y.)

Modern man, Australian bushman, Young gorilla, Gibbon, Old-world monkey, Lemur, Opposum, Pro-mammal, Stem reptile, Early amphibian, Lobefinned fish, Ancient Shark.

tants, but also that Great House of eternal darkness beneath the surface which the Supreme Architect created for them. It is a world much stranger than our own. It is complete unto itself.

Although the constantly-motioned oceans take up three-fourths of the surface of the earth, their actual extent is not yet known.¹ Humans are just now beginning to become interested in and to want to investigate this subject. Thus far, we have discovered the most important thing of all—the ocean purifies the atmosphere which we breathe! It sends off a

¹The Atlantic ocean, 31½ million square miles, comprises more than 17 per cent of the earth's surface. The Pacific ocean takes up about 36 per cent and is twice as large as the Atlantic.

perpetual supply of vapors, condensed into clouds; this is the source of moisture and fertility to the soil. Were this not so we could not exist on this planet as we do. It is, therefore, vital to man's existence, as well as for all vegetation. But how few of us realize it!

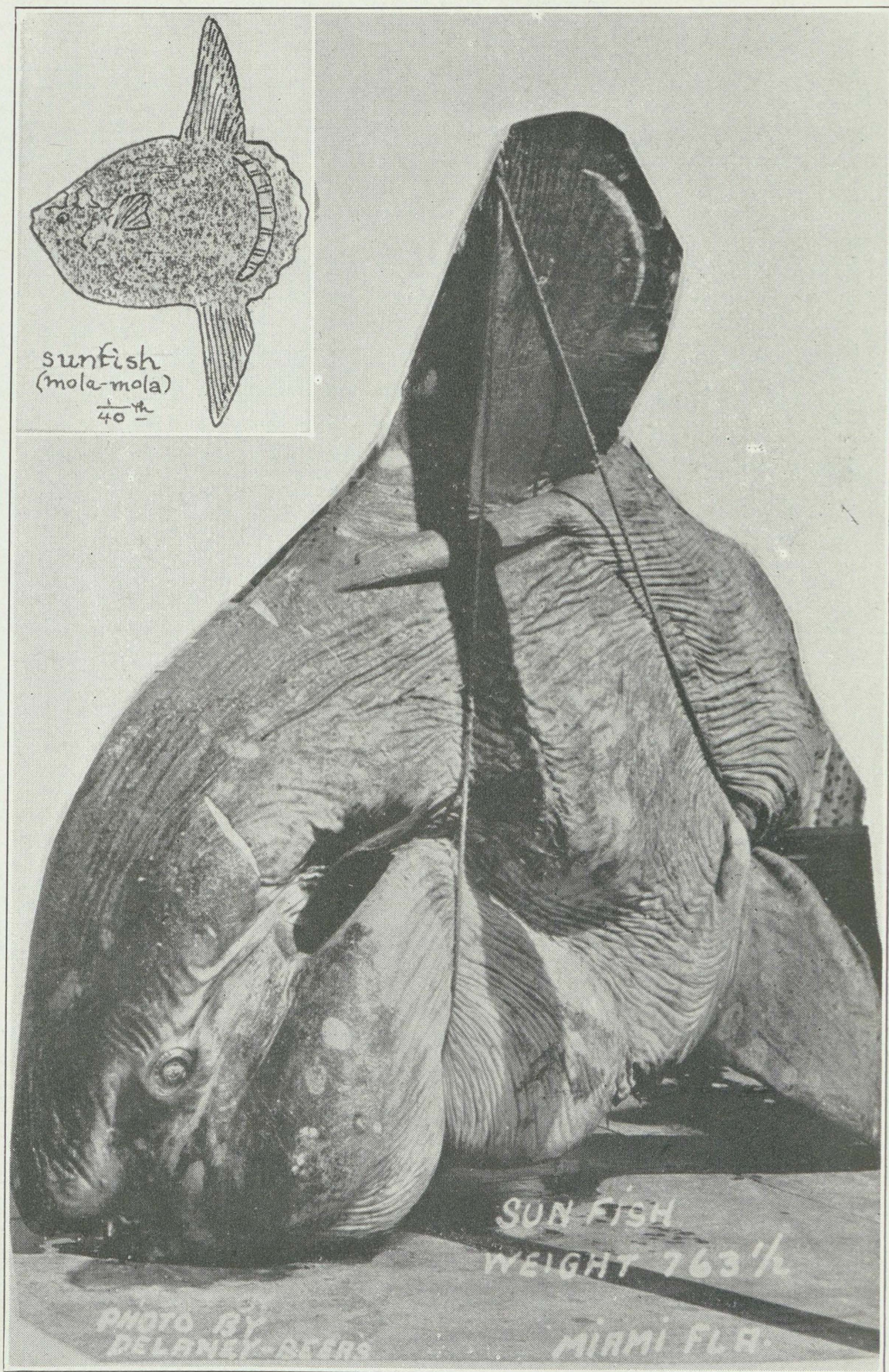
LIFE IN THE REEFS

The perfect clearness of the reef waters makes it possible for us anglers to observe the wholesale display of pastel shades—dazzling sea-blue, soft-green and purple bottom-patches; and on Bimini shores, where the water is especially clear and transparent, we are able to see the uppermost caverns and crevices of these submarine mountains in a depth of 20 to 30 feet. Such varied scenes and sea-romances do we witness as we travel over the oceanic garden. It invokes an admiration which leaves us spellbound. Each visit reveals new, interesting surprises.

Only a sound-color motion-picture apparatus of the very latest improvements could possibly catch and preserve the novelty, the vibrating aquamarine cascade of marvelously decorated reef-patches which form part of the beauty of the sea. Nautical gardens contain fantastically-shaped sprays, plant and coral growths,—yellow, lavender and other high shades; lace-like fan-growths, quietly swaying with the motion of undersea currents. Human artists and taxidermists, although they have spent many years in experimentations, have failed miserably in the futile attempt to duplicate nature's exotic coloring which fishes are endowed with. Their superb decorations are exclusively the handiwork and design of the Heavenly Painter and Sculptor.

All this ornate splendor is far exceeded by the finny population which inhabits the seas. The abundance and diversification of life underseas is almost limitless, especially when compared with the races of mankind, which are but few, comparatively. In addition to the countless forms of life in the marine vastness there are probably 20,000 living specimens of pisces—"people of the sea". They populate it, thickly in some places, like humans and animals do the land, or birds the air. Fishes are the most varied lives in all creation. And their sole existence, apparently, is to eat, breed and escape their natural enemies.

OCEANIC ROYALTY—He who is not permitted to accompany us on this or similar expeditions, to view such grand



OCEAN SUNFISH (*mola mola*)

The weirdest, most remarkable, smallest as well as the largest life in existence dwells in the sea. The diversification of marine life and its abundance are almost limitless.

This large, sluggish, offshore dweller's spineless body is compressed. It ends a short distance behind a pair of flapper-like fins. The hide is rough, somewhat like that of an elephant's. A proportionately small mouth contains more or less fused teeth. The record specimen (caught off California) weighed approximately 2,000 lbs., was nearly 11-ft. long and measured 10-3/4 ft. from tip to tip.

sights, remains insensitive to its rare perfection, its gripping beauty.

Anglers view these miraculous flashes without missing any part of the whole. They visualize the sea's inhabitants, with their color-drenched, glimmering flanked-fins standing out in martial display, as lace-fringed cavaliers. They see chivalrous noblemen, with their ladies, as attendants in royal Fish-Courts! A display of the oceanic wonders in grand array! An underwater kingdom!

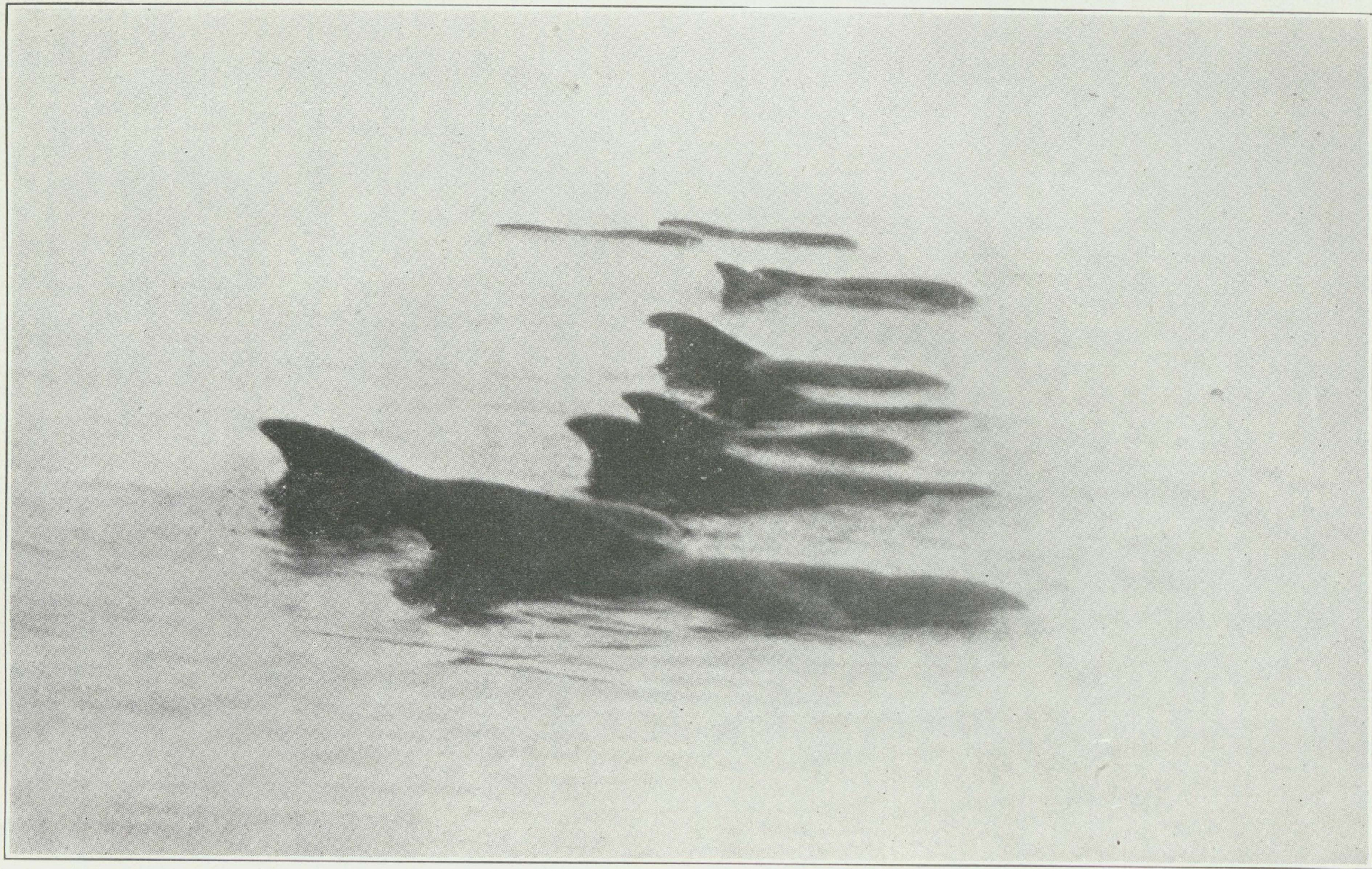
Today and everyday the Sea-King holds court in his Palace of Mystery! Beside him, in her lovely court-dress, is her grace, the Queen-Trigger (turbot). She sparkles with the lustre of her rich robing of green and gold; blue striped from tip of her head to each eye; neck of radiant yellow; bluish green bands, setting off her handsome tail-fin! Bristling, like a jewel under bright electric lights!

Monarchs, Dictators, Regents, Barons, Lords, Ladies-in-waiting! Princes, with their wives and daughters! All intermingling in the sea-ballroom with Imperialistic Sovereigns from other parts of the Fish-World! Literally, there are thousands of them! A royal assemblage of food and game fishes, each distinctive in appearance! All of them pass in review! Agile, alert, brisk, bustling and lively!

Silver sides glittering like shining, metallic silver-lustre! Some are fiery or ruby red, vermillions, dull and bright oranges and yellows, milky-whites with vivid greens, alternating mellow browns and peach-colored hues, deepest and fragile shades of blue, and lightest shades of ivory and pearl—a thousand new tints and delicate shades! Theirs is a variation of pattern and sculpture more exquisite than any other works of nature.

Like budding sub-debs they know that party dresses make a lot of difference, even to a fish. Luckily for them their thoughtful Maker provided these tropical dwellers with power to change costume in an instant, to deceive or assert their self-protection.

Great progress has been made in the past decade in classifying the various species of fishes. A short 35 years ago only about 12,000 kinds were known, and these could be divided into some 200 groups or families. Since then it has been found that a fish-family may have hundreds of different specimens within



KILLER WHALES

These "people of the sea", a school of nineteen "blackfish", left the Gulf Stream, turned north at Cape Sable and drifted into the Ten Thousand Islands waters . . . spouting water thirty feet high . . . They became ill, beached themselves, then died.

Length averaged over 25-feet and weight more than 3,000 pounds each.

its species, while others may have but comparatively few. In rare cases a single species is the sole survivor of his once mighty race¹.

Included is the weirdest, most remarkable and the smallest life (which only a high-powered microscope can determine or detect), as well as the largest in existence. It contains some of the strongest, the swiftest and the most elaborately colored. In the marine world dwells such diversified existence as Starfishes, Mollusks, Sponges, Sea-anemones, Squids, Octopi, Hydroids, Shells, Corals, Worms, Crustaceans and hundreds of other forms of life not to mention the game species and food fishes.

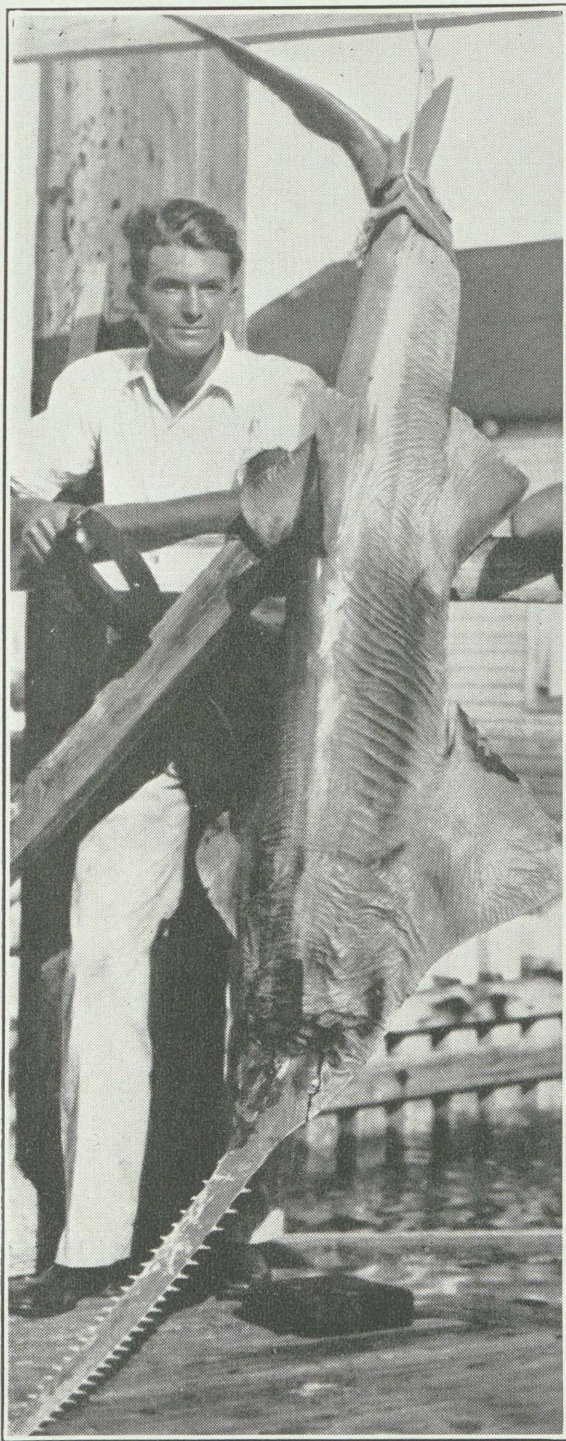
This prodigious variety is perfectly governed. It is perfectly regulated by the miraculous, unceasing physical laws of nature. All are busy accomplishing their individual destinies. These different beings transmit their lives, shapes and conditions to their successors with mysterious exactness in reproduction. It has continued and will continue throughout the centuries.

Everyone who aspires to become a devout angler should know something of the PEOPLE OF THE SEA. This knowledge can be obtained without one's becoming an amateur ichthyologist.² Too much technical data and names would hamper rather than help us. For such information access may be had to numerous books by those who wish to pursue the subject further. We cover the subject briefly, touching upon the essential factors in plain, understandable terms.

¹QUERQUEVILLE THING—Sea monsters are frequently reported to have been seen. Only recently has it been possible, however, to furnish definite proof of their existence. Early in 1934 reported TIME:

"On the grey coast of Normandy (France), at Querqueville, the sea cast up a monstrous thing. Fearsome enough in life, it lay battered by waves and rocks, pecked at by gulls, decomposed by death. It was 25-feet long, about 5-feet around. Its bluish-grey skin was covered with what seemed like fine, white hairs. What was left of its head hung on a 5-foot neck, looked like a camel's. . . . The remains of its tail resembled a seal's. . . . Someone suggested it was the *Loch Ness Monster* (Time, Jan. 15, 1934) sighted last December in Inverness harbor, heading out to sea. . . ."

²ICHTHYOLOGY is that department of zoology which treats of fishes; the science or scientific study of pisces. It is divided into three main parts: *Systematic Ichthyology* dealing with the defining, naming and classification of fishes; *Economic Ichthyology*, the study of fishes in relation to human welfare. Its most important branch is concerned with their use as food, fisheries, fish culture, etc.; *Philosophic Ichthyology* concerns itself with the fish and its place in nature. It is the broadest and purest aspect of the science. It follows the evolution of fishes by the evidence of fossil-records from earliest periods of the earth's history to the many specialized forms of the present day. It examines the wonderful correlations existing between the habits and structure of fishes. Its possibilities and ramifications are almost limitless.



SAWFISH

These large sharklike rays are of the genus *pristis*.

They have a flattened and elongated snout with a row of stout, toothlike structures inserted along each edge.

The species inhabits shallow, warm waters, principally in tropical seas.

Average length is 10 feet, but some grow to 20 feet.

This specimen was taken near Key West, where exist "people of the sea" in great variety.

own pleasure they are permitted to devour even the populace at will. They assume a dignity and dress commensurate with their individual ranks.

CRUSADERS — Observe that division of fish-life which interests us most — that sturdy-looking and vigorous group, some of whom are even haughty in their demeanor! Evidently they have no attachments, language or affections; no feelings of parentage. They are talented sea-generals — game fishes. That group we now see has just returned from fearless exploits in another realm. Armed with weapons like lancets or knives they cause others to stand in fear, at rigid attention. Bayonets fixed on musket, sabers drawn, these fellows are equipped with special armour and arms. To settle a dispute they may follow a clarion call outside their province. They are capable of performing tricks and military feats of strategy either undersea or in midair, as mood or occasion demands, when engaged in deathlike combat.

These crusaders are the marine Knighthood, the aristocracy of fishdom! They are the constabularia! Their primary duty, like knights of old, appears to be personal services in the field. Consequently, they are allowed certain attributes not granted other fish-peoples, for at their

Romantically gallant and brave service-warriors continue the golden age of chivalry!

To the uninitiated theirs may appear a silent and monotonous life. The angler, who has met them in glorious attack, knows different. When, to all appearances, they are not lying motionless for their incipient dinners, the undersea highways are filled with bustling, hustling fish-traffic—without the expenditure of nerve energy and the wear and tear to which the human body is exposed. Fishes live in elegance; they have variety, beauty of scenery and diversity—nothing is omitted which could make life more attractive to them. They dwell in places more exquisite than in all the world's range of natural objects.

Those determined-looking fellows are probably secret-service operatives, underseas "G-men". Notice how they prowl about, seemingly unconcerned, but the slightest move from an observer makes them instantly alert. That rare fellow off-sides is equipped with bristles, like barbed-wire entanglements.

In that far corner, observing the lavishness and display and quietly conversing amongst themselves are the scholarly Ministers of State, wearing priestly robes, with oriental coloring.

There stands the flag-bearer of his genus—the Parrot-fish! He takes his designation from a fancied resemblance in the jaw to a parrot's bill. Elegant, regular and oval form, decorated with the rainbow's multiple coloring, the tropical waters add extra beauty by way of contrast. His head is a rich chestnut-brown blend of crimson and sea-blue; beneath this is a band of orange-vermillion. His middle and sides are marked by bands of varied, brightest hues. An ultramarine streak arises at the angle of the mouth; this lovely tint crosses his cheek like a battle scar, finally disappearing somewhere over his body. His warlike fins are gorgeously decorated in olive and blood-red mixtures. As a triumphant zenith of its coloring the entire fish is spotted with delicate, fairy-blue and peacock lustres.

Last, but not least, we see the great peasant population. Admiringly they fill the watery-streets! Some are frolicking while others play or stand by, idling. All view the gorgeous pageant.

. . . . Such is the vast array that swims in grand parade towards the throne-room. All strive to excel in exhibiting their over-developed pride in gay costuming.

The whole is so lively and engrossing it forms a glowing theme for the imagination and a thrilling background for piscatory endeavors. Such is what the devout anglers' eyes perceive as he moves silently on his mission. He knows that nature insists on creating things and lives for sheer beauty. Mankind cannot imitate, duplicate or destroy this.

Circumstances prevent us from stopping longer in this wondrously enchanting realm. We leave the fascinating scene, but not without deep regret.

We must hurry on our way to the battlefield.

MARTYN, an early voyager, attributes changes of the sea's coloring to that of the skies:

"If the sky be cleare, the sea lookes as blewe as a saphire; if it be covered somewhate with clouds the sea is as greene as emeralds; if there be a foggy sunshine, it looketh yellowish; or if it be quite darke, like unto the color of indigo. In storming and cloudie weathere, like black sope or like unto the color of black leade."

PISCATOLOGY (SCIENCE OF FISHES)

DEFINITION—Just what is a fish? In the older, more conservative classifications fishes are referred to as “pisces”. From more recent authorities a fish, which constitutes the class pisces, may be defined as follows:

A vertebrate (having a backbone or spinal column); typically a long, tapering body, covered with scales and ending in a broad, vertical caudal (tail) fin adapted for life in water (therefore completely aquatic); water-breathing (respiration being chiefly by means of gills); lacking a definite body-temperature (regardless of that of the waters it inhabits), it is called “cold-blooded”, and possesses paired fins.

While the yolk-sac, upon which fish feed, lasts (usually about a month) they are called “fry”. (Mammalian species, only, are attached to and instinctively look after their young.) After passing this stage they are called “fingerlings”. A year later it is a “yearling”; when 2 years old it is called a “2-year old”; after 3 years a “3-year old”, etc.

FISH DISTINCTIONS are the ones provided for them by nature herself. Fish customs, their habits, features, home life, travels, instinct and individual dispositions, as well as their capacity, aspects, domain and variety, are all affected by natural barriers, the particular waters they inhabit, direction and temperature, strength of water-currents, depth of the water, proximity to shoreline, tides, bottom arrangement and conditions, food-supply, climatic conditions and numerous other things. The sea, itself, has a definite influence on all of its animal and vegetable inhabitants,—they are affected by the density, saltiness, bitterness, wave-agitation and movement of underwater currents, temperatures in different regions, etc.

HABITS AND INFLUENCES—Fishes in one form or another may be found wherever there is water, ranging from the freezing Arctic Ocean¹ to the hot springs of the southwestern part of the United States. By far the greatest varieties are found to spend their lives in the brilliant coral-reefs in tropical regions.

¹Biologists who accompanied Rear Admiral Richard E. Byrd (b. 1888), the aviator and explorer, on his South Polar expedition displayed motion picture proof of organisms which they found in snow-ice 75° below zero. They heated this snow to thaw out and bring back minute life, after a sleep of perhaps thousands of years, at the bottom of the world.

The Gulf Stream current is of tremendous importance to fish life. This great current is offshore in some places while its southern extremity almost laps the coastline in the tropical surroundings.

TROPICAL (FLORIDA) WATERS—About 100 miles south of Jacksonville we come gradually into truly tropical waters. Off of the sandy shores and mangrove inlets the conditions for fish-existence are ideal. As we proceed further southward towards and below the peninsula's southern tip and down the Keys, then up the western border along the Gulf of Mexico, we find a very large variety and the greatest numbers of fish species.

(On the chart in next chapter is shown the special places and locations south from Miami to Key West, where game and tropical fishes abound, both in "outside" and "inside" waters for a distance of 140 miles. These are the author's favorite haunts.)

FISH MIGRATIONS—The United States Bureau of Fisheries caught and marked a red salmon in Alaskan waters; then it was released. It was recaptured 44 days later in a Siberian stream. The fish had traveled at least 1300 miles (probably more) in the meantime.

DEPTH—Professor Burt Richardson, of Scripps Institution Research Association, made experiments to determine how far down daylight penetrates the ocean. It was reported that about 200 feet of depth is the point the last rays glimmer out. Dredging off Puerto Rico has been done in water more than 24,000 feet deep. Spots in the Atlantic ocean, the greatest depth of which is said to be about 28,000 feet, have been sounded and scientists inform us that the pressure of sea water at a depth of about 6000 feet is approximately one ton per square inch; at 9000 feet it is said to be triple this, but fish life has been found to exist at these pressures, living as comfortably as birds do in atmospheric pressure.

HUNTING TRIBES—Most "game" fishes are surface feeders. One of their characteristics is that they "hunt" their prey, principally. Another feature is that their caudal (tail) fins are usually deeply cleft. They are the sea-warriors whom we seek to engage in mortal combat.

Included in this classification are such species as the much sought Sailfish; the mighty Tarpon ("Silver King"); the

great Tuna; that depraved example of marine treachery and fiendish traits, the Great Barracuda; that powerful, aristocrat of great, uncanny strength, the Great Amberjack; the spectacular-performing Kingfish of the mackerel family, who has an inherited appetite for any moving shiny metal-piece that is dangled near him, causing him to leap clear of the water in his haste to snap it up; then that singular fellow of strange beauty, the Bonito; and, ranking high in game-fish society, the amazingly swift and gloriously decorated Dolphin. Likewise we encounter others who are unusual in many respects besides speed, strength, build, color, rarity, tenacity, grandiose performance and a multitude of other qualifications. These are the marine knighthood.

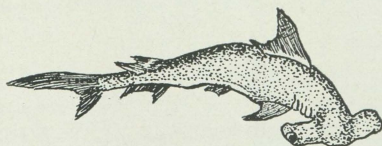
We shall soon meet these sea-knights and engage them in hand-to-hand conflict. Before battle, we shall, like good generals, seek to learn all about our enemy; especially his power and position. With such information we will be better enabled to govern our own forces. We have sent out our trusted captains (guides and skippers) and they have brought us enlightening and interesting reports. The data has been properly assembled by our Intelligence Department. We will study it briefly before we enter the battle area to oppose the fish-forces. It will enable us to exchange lance-tilts with them in the chivalrous manner they so well deserve. Our "prisoners-of-war" will be better appreciated when we know what it is that makes them different from other backboned animals.

LEVIATHANS—These great, slimy fellows include the Octopus, the titanic Manatee (Sea-Cow), Ocean Sunfishes; Whales and Porpoises, which are not true fishes, but are members of the great sea-mammal families; and the Hammerheads¹ and

¹**HAMMERHEADS AND OTHER SHARKS**—In June 1931 the author caught the hammerhead shark shown in this chapter off Cape Florida, near Miami Beach. Its weight was estimated at about 1,000 pounds. The struggle lasted nearly 4 hours. Finally, through an accident, the colored mate aboard had his hook caught in the tail of this monster and with his help we were enabled to bring the vicious thing alongside and towed it into the Causeway dock. (Capt. Tom's Shark Fishing Boat, Capt. Theo. Houser, guide).

A whale-shark 38-feet long, girth 18-feet, approximate weight 26,000 pounds, was harpooned June 1, 1912, at Knight's Key, Fla., by Captain Charles Thompson, according to a report.

"SHARK! SHARK!" (by Young and Mazet, published 1933 by Gotham House, N. Y.) is one of the most interesting volumes on sharks ever the author has read.



HAMMERHEAD SHARK



MAKO SHARK (*lamna*)—ATLANTIC RECORD

Length $10\frac{1}{2}$ ft., girth 6-ft., approximate weight 1000 lbs.

Caught March 2, 1936, by Al Hack, of New York, noted shark angler, while stillfishing eighteen miles out in the Gulf of Mexico off Edgemont Key near St. Petersburg. Tackle: 9/0 "Atlapac" reel, one-piece 9-ft. overall rod of Calcutta-Burma bamboo, special 39-thread line, 12-ft. heavy duty .035 steel leader wire. Time: 2-hours, 40-minutes. Guide-Captain: George Black, St. Petersburg Yacht Basin.

The American Museum of Natural History advises that: "Mr. Hack's shark weighed 1009 lbs. It was a lamna, one of the mackerel shark family, *isuridae*, all of which are commonly called makos in different parts of the world. The three most commonly called mako are lamna, *carcharodon* (the white shark) and *isurus* (mackerel shark) also present in New Zealand as *isuroopsis mako* . . . We have a photograph and teeth from Mr. Hack showing his shark to be a lamna."

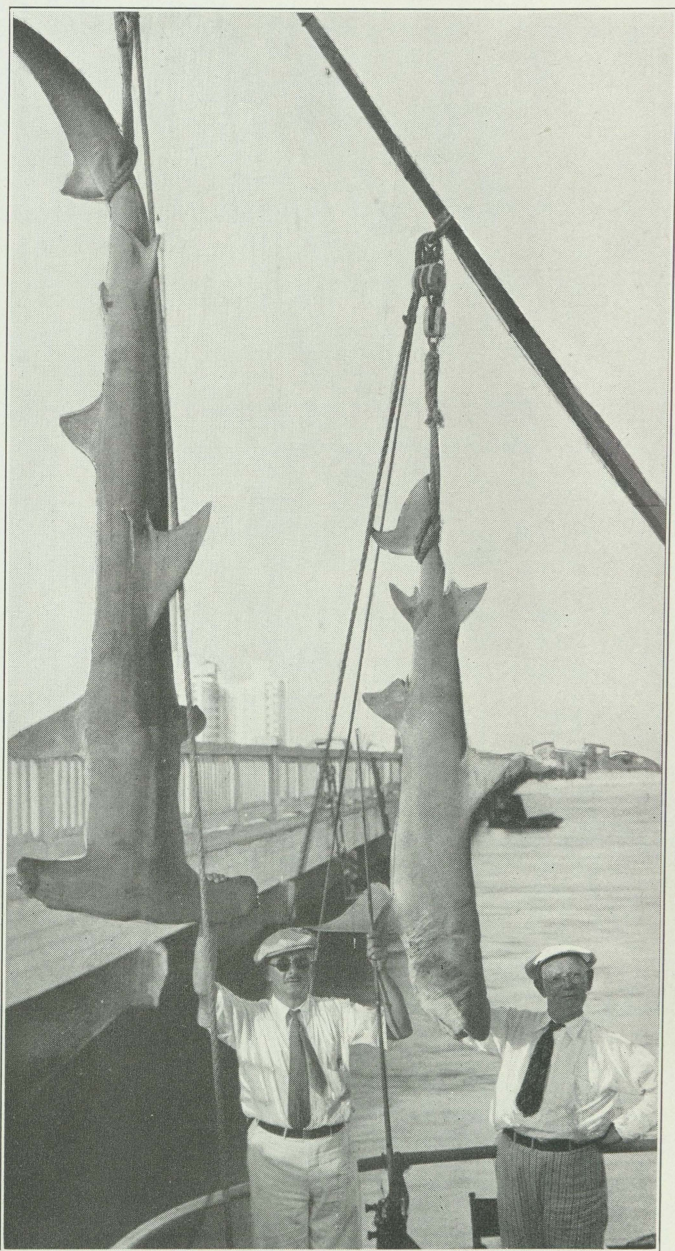


MAKO SHARK (the only game species of shark).

Taken with rod and reel offshore in the Gulf Stream near Bimini Island in June, 1935, by Ernest Hemingway, novelist and writer, of Key West. The author was one of the "committee" present to weigh in this 786-pound specimen, an Atlantic record when caught. Norton Conway of New York hooked a 798-lb. mako shark off Bimini in April, 1936. It was not "boated" according to "regulations" but was shot. Captain John Cass acted as guide.

When stroked forward the mako's hide is velvety-smooth, rough in the opposite direction. It is rare and very acrobatic in high, spectacular leaps when hooked.

A mako white shark, 2176 pounds, was reported caught with rod and reel in 1928 by W. W. Selkirk off the South African coast.



(The author)

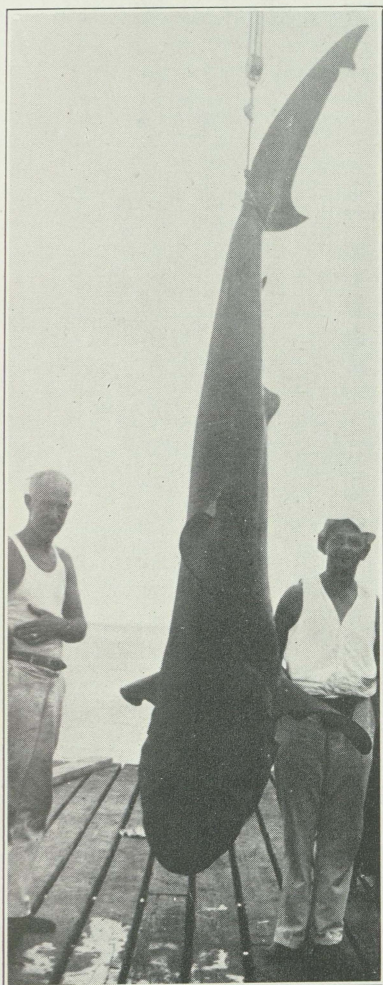
(His father, age 74)

HAMMERHEAD SHARK (left) caught off Cape Florida, June, 1931, on Captain Tom's Shark-Fishing tug.

The 12-foot long specimen, weight about 1,000 lbs., had a tail-spread $9\frac{1}{4}$ feet, body circumference of 91-inches. Note the protruding eyes at each end of the gigantic hammers, each one yard from the head center.

Tackle: 4/0 "Edw. vom Hofe" reel, 18-thread line, 12-oz. rod-tip.

LEOPARD SHARK (right), female—A rare and dangerous species, weight about 350 lbs.



THOUSANDS of cannibalistic sharks prowled in the Gulf Stream between the Florida mainland and Bimini Isle. When a gamefish is hooked it rarely can be boated before large schools of these fiends tear huge chunks from the victim's body. (See illustration in this chapter of giant tuna mutilated by sharks.)

This black-fin, 10-foot specimen weighed 320 pounds. Taken by the author June 19, 1935, on rod and reel, with 30-thread line, it will do no more damage. Captain Roy Stewart (left) on his cabin-cruiser *Sport* acted as guide.

other sharks. We may encounter them but do not choose to keep company with them in our ventures. They do not fit into our expedition's plan, so little further thought will be given to them.

CRUSTACEA—Nor are we particularly interested (except to be certain that an abundance of such life is available, because game fishes are likely to be closeby) in the other extreme: the minute forms of fish and sea-life. Some of these can be seen only with the aid of a powerful microscope. These one and more cell-life or water-beings we leave to scientists who devote their lives to their work. Their reward is personal pleasure and satisfaction. This applies also to mollusks; shell-life, such as oysters, clams, lobsters, shrimp, starfish, etc. They serve their purpose when they provide food for the fishes we seek, which is our only reason for mentioning them. Their variety is so immense entire volumes would not cover the subject completely.

MARIPOSES—These are the highly ornamented species which dwell chiefly amongst the coral reefs. Among others they include the parrot-fishes, yellow-tails, snappers, angel-

fishes, porky or hog-fishes, groupers, turbot, bluefish, squirrel-fish, doctor-fish, sheepshead, moonfish, etc. A large variety are usually kept on exhibition in aquarium tanks.

The different kinds may average from one-half to several pounds each. When obtainable we can use them for "live" bait for tarpon, amberjack, barracuda, etc.

Their brilliant, rainbow hues and extremely delicate shades make them very interesting. Even the most gorgeous gems do not have the richness of lustre possessed by these undersea creatures. The mind becomes bewildered in observing such rare beauty and vastness. To get the best view of them we hold a wooden-bucket, which has a glass bottom, on the water's surface in calm days. Thousands of these butterfly-tinted fishes swim beneath us in the startling scenes which appear in the depths below. They are more exquisitely colored than anything else in nature's animal, mineral or vegetable kingdom. The merest glimpse verifies this fact.

Some are scarlet or crimson, sky to deep-blue, radiant gold, rich shades of lavender and marble designs of fawn, velvety brown, mother of pearl and pale pink, deep-shades of flaming yellow, designs of warm green blending with silvery-blue, pastel and royal shades, purple or burned silver mixed with gold,—bespeckled, dotted, dashed or splashed over their well-shaped bodies in solid and mixed combinations. They form no end of the blends of primary colors, each having the appearance of having been dipped in magic, enamel fluids.

They hold the spectator spellbound! The profound harmony with which the seas in these tropics are animated and beautified arrests the attention. The delicate and perfect workmanship is fairy-like!

Count de Lacepede (1756-1825), a distinguished French naturalist, refers to his findings in the sea as "the utmost unity and diversity which constitutes its beauty; grandeur and simplicity, which gives it sublimity; puissance and immensity, which commands man's wonder." On the mariposes the great Heavenly Painter lavished celestial coloring.

BUILD AND BODIES

We shall now look closely at the structure of fishes. We will examine them and their organic functioning. The information so evolved will be of material assistance to us in our angling endeavors. It is not expected that any except those of our clan who are devoted to the sport will be interested. For their special benefit and entertainment these lines are written.

The real difference in the various kinds of fishes may be determined by a comparison of their bodies, fins, teeth, head, snout and maxillary jaw. Nearly all true fishes are covered with scales (or bony plates), some large, some small, others minute. All fishes end in a caudal (tail) fin, either broad, vertical or forked.

The more typical forms of true fishes are somewhat elongated; they are shaped for easy passage in the water. Boat-builders have spent much time studying the lines or forms of various species of fishes with a view to securing speedy craft. Streamlining of the fish-body is diversified according to the uses and habits required of them by the various species.

COLORATION—Many fishes are capable of changing color at will. They do so either to hide from their enemies or to make themselves unseen when seeking prey by making their appearance the same shade as the surroundings. Therefore, coloration is of little assistance in the identification of the various species. Their colors fade or may be otherwise modified at death.

HEAD—The skull or cranium of a fish is usually well-developed, with a prominent lower-jaw. The head is pointed and compressed laterally, like its body.

The brain is minute. The cavity which contains it has a few "nerve-centers" around which is oil or fat.

Fish have no perceptible neck. The absence of a definite neck serves the advantage of a more extensive and resistive attachment to the body of the head. It leaves the greater part of the fish free for the play of its muscular masses which move its tail.

TEETH—The teeth vary greatly in size and shape and arrangement. They may either be flat, plate-like or long and

sharp. They are set in the jaw and also in various areas inside the mouth and gullet, such as the tongue. Professor Owens says with reference to fishes' teeth that "in regard to their number, form, substance, structure, situation or mode of attachment," the teeth offer a greater and more striking variety than do those of any other animal classification.

In sharks and rays the teeth are supported by the upper and lower jaws (as in most quadrupeds). Other fishes have teeth growing from the roof of the mouth, from the surface of the tongue, from bony hoops or arches which support the gills, etc. Some even have them developed from the bone of the nose and base of the skull. Frequently during their lives fishes shed their teeth.

HEARING—A fish has no external ears. In many cases the quality of hearing is not necessary. However, because water itself is an excellent conductor of sound, hearing in fishes is without the aid of external ears, like ours. In some species the sense of hearing is fairly well developed while it is not in others.

Aristotle, whom we have learned was the father of natural history, writes of fishes which were attracted by music. Fishermen on the Danube, too, were wont to attract fishes by ringing bells.

Fishermen who angle for the sport of it prefer absolute quiet while performing their pleasurable labors. In fact many are gifted with a select flow of unprintable language which is called into use in quieting boisterous persons who do not heed a first, modest request to refrain from making unnecessary noises. (See "Touch and Feeling").

SPEECH—Fishes have no organ of speech. They are condemned to reside, as one writer expresses it, in the great empire of silence where all around them is mute as the grave. A few, however, are capable of making sounds in a limited sense. This they accomplish by vibrating their swim-bladders, which act as resounding chambers. It is thought that this has considerable importance in their lives, but we are unable to determine just what it is.

About 100 years ago a U. S. Naval officer, Lieutenant White, published a dairy of his voyage into the China seas. He comments:

"At the mouth of the Cambodia the crew and officer were astonished to hear certain unaccountable sounds. These varied noises beneath and around our vessel resembled the bass notes of an organ; the sound of bells. The mysterious music came upon us and formed a universal chorus all around. As we descended the river the sounds ceased."

The ship's interpreter declared that the marine music was made by fishes which emitted these noises when they adhered to various bodies.

EYES AND SIGHT—Some scientists report that only a few species depend much upon their fish-vision to assist them in locating food. Practically all fishes have large, attractive eyes. These are prominently situated, with broad and open pupils and extremely wide angle lens. It enables the fish to see for short distances only in several directions at once. They have no eyelids as we have, but the skin is drawn over the eye and is transparent. Of them someone wrote with feeling:

"No tear moistens, no eyelid shelters or wipes the surface".

The eyes of some fishes are located on the upper surface, permitting the particular species to swallow without seeing his food. The sight of fishes is somewhat complicated by the conditions of the vision under water, due to refraction or reflection under the surface. To some extent it is believed they can distinguish color. It is not known just to what degree.

TASTE AND SMELL—The "nostrils" or organs of smell are a pair of pits in the skin at the anterior dorsum of the head. These are located high in the forehead and lined with cells. They are not used for breathing, as in man, but are for the purpose of detecting food in water.

In some the sense of smell is highly developed, as in certain kinds of hunting dogs. These can scent their prey at a distance—a quality which sometimes proves their undoing. Practically all have a chemical sense corresponding to our sense of smell; they are believed to taste with their skin which assists them in locating food. "Barbels" or end buds about the head of fishes are almost certain to be covered by these "taste-buds" which function when they are in search of foods. The degrees of taste and smell in fishes varies with the different species. It is a matter of general agreement amongst authorities, however, that the sense of taste is not particularly acute.

TOUCH AND FEELING—Fishes have no prolonged members like flexible fingers for grasping. Therefore, the sense of touch is almost absent. Their sole sense of touch is by means of their lips.

It is not exactly determined which is more perceptible to the fish, its hearing or feeling qualities. A fish has a "lateral" line located near its center and traversing its length. Apparently, this is a most important factor in its feeling. It is thought that each movement of the water produces a disturbance which registers on this lateral line; it is felt or sensed by the fish.

Due to the energy of sound waves in water (as previously stated, water is an excellent conductor of sound, being very slightly compressible, but it does not have the cushioning effect on sound-waves which air does) these pass through the hard tissues of the fish's head and fish-ear in varying degrees and become felt. For example, relatively loud and foreign or strange noises have an immediate effect upon the movement of fishes. Indeed, some dart away quickly or are aroused at the sound which they "feel".

FOODS AND PREY—Nearly every marine animal feeds upon some smaller sea-life other than itself. Almost all species are flesh-eaters. They live on minute organisms and tremendous hordes of minute, odd-shaped creatures which are found at different depths in the sea; young or larval forms of water-life, inconceivable swarms of true crustaceans, water-insects, crayfish, snails, fishroes and fry, worms, frogs and a tremendous variety of other foods, according to their own individual species, structures and other governing factors. All these are constantly being consumed by fishes; still larger ones consume these latter; and the big fishes consume them all.

It is a never-ending struggle for existence. Were it not for fish eating fish, the waters would soon become filled to overflowing; the seas could not contain more than a small part of them. This will be better understood when it is taken into account that many fishes spawn more than a million eggs in a single cluster. If all these eggs were hatched into little fishlets (a million or more children at the time!) and these in turn increased in rotation, how long would it be before the waters on the earth's surface would become overfilled?

Would they not grow legs and drive the human race from earthly existence? Unrestrained breeding then is, from a biological viewpoint, an evil thing.

In the forepart of this book reference is made to human epicures. Strange as it is, some fishes are epicures, too. They may even prefer to starve outright in the absence of just the kind of morsels they prefer. This probably accounts for their refusal to take a choice bait when offered. When these "spells" come upon game fishes, they cause the fisherman much anguish. Others, we are glad to say, are not so "choicey", though they may be somewhat select in their choice of rations. Then, too, we might mention those who take anything, such as sharks, in whose ugly vitals have been found conglomerations of all kinds varying from shiny metal pieces, shoes, tin-cans and junkets and whatever else they could locate.

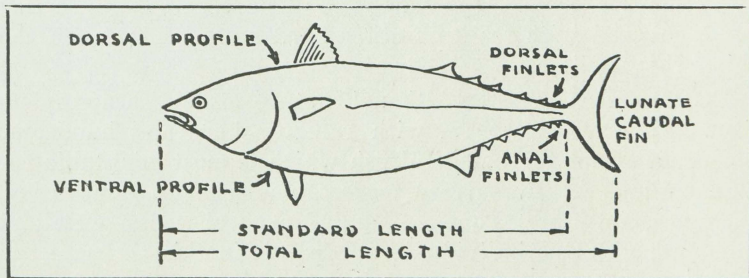
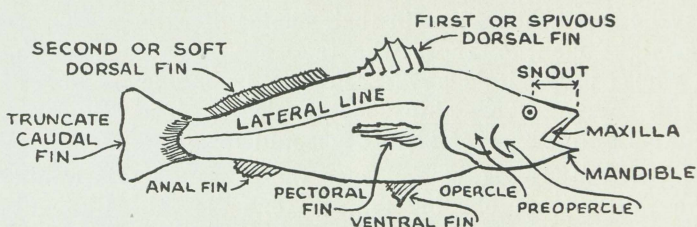
DIGESTION—Have you ever wondered what it would feel like to have an elastic stomach, one flexible, like rubber? There are fishes so equipped. The digestive system consists of an alimentary canal with its more or less definitely marked divisions (mouth, pharynx, gullet, stomach and intestine). There are no salivary glands. The gullet and stomach vary with the food and habits of individual fishes. Predatory and other species swallow their food without mastication and stow away large objects. The tongue may be of a substance like bone, covered with teeth or other hard material to crush the thing they find.

FOOD QUALITIES—Although nature made fishes resplendent by decorating them with rainbow hues and handsome blends, it is not the beautiful fish which is most adaptable for man's food. A few surface feeders amongst the game fishes, such as Kingfishes, Pompano and Mackerel, make excellent human food. One individual expresses it in this manner:

"It is the flavor which forms the test of merit, which, when with wholesome qualities combined, forms the intrinsic value of all food. If it were exterior to claim the palm, then must the woodcock to the parrot yield; the spotted leopard supersede the deer, the dories to the blue-striped wrasse give place."

FINS AND MOTION—The absence of hands and feet in fishes, for purposes of feeling, is remedied by nature. Instead of limbs they have fins which serve the purpose of making swimming possible, like our feet do in walking, and to propel and guide their body.

EXTERNAL TOPOGRAPHY



From 1935 World-Record Gamefish chart by Bishop & Sims

Game fishes are elongated. They swim chiefly by undulations of the body. Most short-bodied fishes depend upon their caudal (tail) fin; the other fins are principally for balancing and controlling their movements.

Fins are wing or paddle-like, made up of more or less flexible rows or rays, connected and supported by stout membranous, cartilaginous or bony rod substances. They are developed into the fish skeleton and flesh. The number of supporting rays in a particular fish species is constant. In fact, this is one of the most important factors in determining the species. It is somewhat as the normal man or woman has five fingers or toes on each limb—like a horse or cow has clubbed feet. The presence or absence, the shape, position, etc., of the fins also serves to identify its genera.

Usually there are two sets of paired—pectoral and pelvic—fins, besides the other—median—fins. The latter includes the dorsal or back, the caudal or tail, and the anal or posterior part of the underside.

The dorsal (upper, surface or top) fin may run part of or the entire distance of the fish's body. It acts as a balancer, like an umbrella used by a tight rope performer.

Past the middle of the fish its body slopes towards the tail or caudal fin. This is its organ of motion—the fish rudder and paddle. It is his most important fin-attachment, enabling the fish to guide itself, to leap out of water and, sometimes, is a means of defense. When a fish desires to turn, in either direction, this screw or propeller fin makes a single flip which causes the body to turn completely around. To move forward quickly its powerful tail fin makes a double lash.

Near its abdomen is the anal fin, which furnishes the fish with stability, co-operating with the other fins in motive and balancing power.

The pectoral fins, corresponding with our forelimbs, are located upon each side of the fish's body, just behind the head, resembling partially outstretched oars on a boat. These serve to raise and depress the fish and to arrest motion when it desires.

The pelvic fins, corresponding to rear feet or hind limbs on animals, resembling outriggers on a boat, vary greatly in position with the different species. When placed well behind

the pectorals they are referred to as abdominal; thoracic, if placed under them; jugular, if placed forward at the throat. When the fish wants to move backward he makes a stroke forward with these front fins. Fish may move backwards, but not for long periods or distances.

SWIM BLADDER—Although it is not generally realized, the swim-bladder of a fish is one of the most delicately balanced and wonderful instruments created. It enables the fish to maintain itself at various depths or to rest or sink. Species which are not thoroughly equipped with it must rest on the bottom.

Nearly all fishes have a specific gravity equal to that of the water they inhabit. Gravity, as we know it, does not exist for them. Their stability is regulated by this organ—a bladder which contains gas—located at about the middle of the fish's gravity. It may be found easily in some fishes, such as the herring,—a shiny, pearl-like membrane which is almost enveloped by the roe or milt of the fish. It is of this (when dried and prepared by certain processes) that the substance called isinglass is made.

SCALES—Fish scales, resembling horny plates, may be minute or large. They cover most of fish bodies. These are silvery round bony-like tissues. They are an outgrowth of the skin, and arise from the derma or deep layer of skin and may be compared to locks of human hair embedded in glue. They are placed like wooden shingles on a roof, the free end pointing backward. Microscopical examination of annular rings in fish scales by scientists helps determine the fish's age.

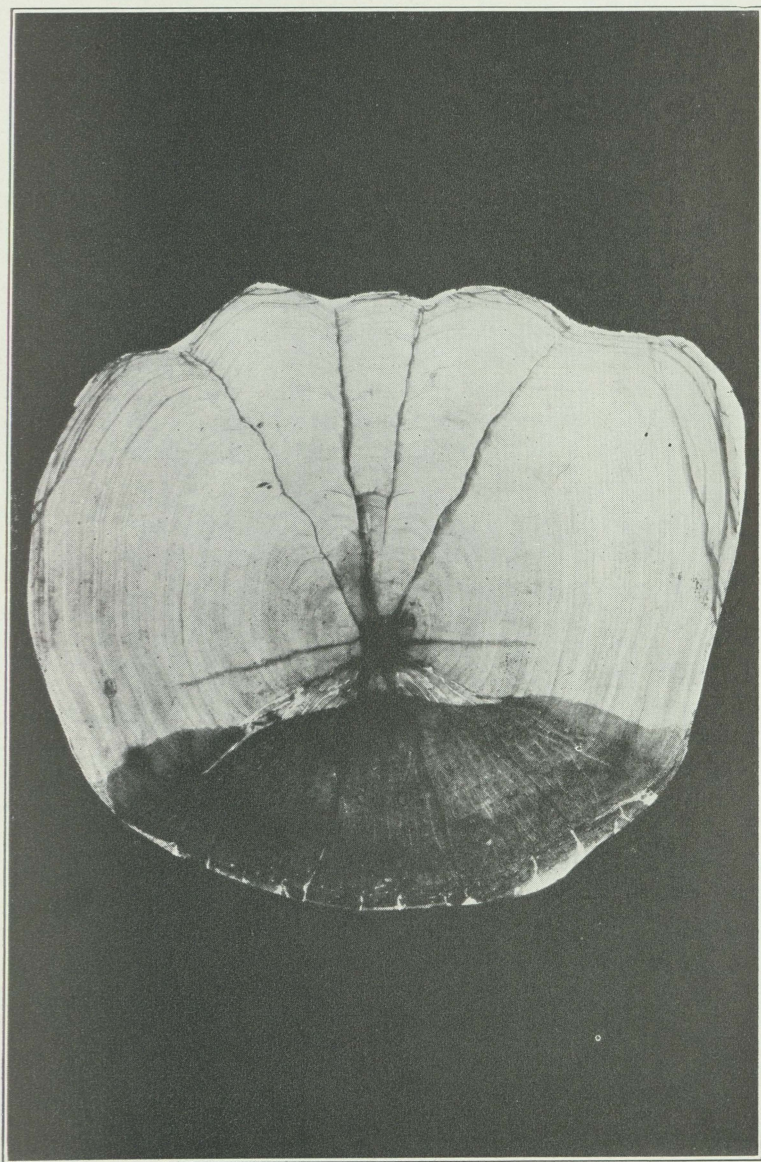
Dr. Julian D. Carrington, Ph. D., in "Inventions", June, 1935, states:

As a bird may be told by its feathers and a mammal by its hair, so a fish is known by the possession of scales. Because these body coverings reveal amazing facts regarding the life and ancestry of certain fish types, they hold much interest for the microscopist.

Of all animals, only fish have a clothing of bone scales, whereas the so-called scales or "scutes" of snakes and other reptiles, are composed of horn, as are feather, hairs and nails.

Bone is living, while horn is lifeless.

Most people think that a fish's scales are on the extreme outside of the body. But these animals have a very thin epidermis. This layer secretes the slime coating which protects the fish from bacteria and fungus growths.



TARPON SCALE

The fish's age is revealed by the number of fine, concentric lines contained in one of its scales. Each line denotes a year of age or growth.

Tarpon scales average 2 to 3 inches in diameter. The heavy lines extending from the center towards the top are natural. The lower portion is silvered and never fades nor washes off, the luster of the silvery tip remaining indefinitely.

The first animals to own an overcoat of scales were sharks and their relatives, and from them were derived the different kinds of teeth in the whole array of backboned animals.

Scales form a bodily armour or protective coating. In chemical composition they are similar to bones or teeth. Certain scales, arranged in a line on each side of the fish, are pierced with tubes or unicellular glands. Through these they secrete a slimy, almost liquid matter. It lubricates the body and makes it slippery. It is believed this mucous contains pigment cells which color the fish's body.

Scales may be very large, as in the case of tarpon, whose scales measure from 2 to 3 inches in diameter, or they may be so minute as to be almost invisible to the naked eye, making the skin appear smooth like that of the pompano, mackerel, turbot, flounder, etc. Because of the variation in shape and size of scales these form another guide in the classification of the various species of fishes.

A little above the middle of the fish's side and paralleling its body, lies a row of slightly protruding, specialized scales. These are supposed to have some connection with the nervous system. The line which they form across the length of the fish's body is referred to as the "lateral line", as already described.

HEART—Although it is of a low form, all fishes have hearts. It is the simplest kind of pulsating tube, a single affair of two cavities. It corresponds to the right or pulmonic heart of birds and mammals. The organ is located in front of the body, directly behind the place where the neck would be if one were present.

It is not necessary for a fish's heart to be located on its left side, as it is in humans and mammals; it can be in the mid-region or any other part of the fish.

CIRCULATORY SYSTEM AND RESPIRATION—The method of circulation and respiration in fishes is somewhat like that provided in the higher animals, except that in place of lungs they are equipped with gills. The gills are located at the back of the fish's mouth. They consist of a number of arches, upon each of which are two rows of red fringes into which the blood comes very near the surface. These are in immediate touch or communication with the heart and have a large number of blood-vessels placed near the forward ex-

tremity. The gills are protected by a bony-like case or cover and often strong spines in addition.

(A few species, such as whales, porpoises, manatii—sea-cows, all mammals, tarpon, etc., have rudimentary lungs in addition to gills to supplement circulation.)

Water (which is impregnated with atmospheric air) is taken through the fish mouth, passed through the bronchial clefts, then out at the gill openings upon each side of the head. An almost constant stream or flow is thus maintained, entering and being alternately expelled with regularity. The blood (as it passes the gill arches) takes up the oxygen dissolved in the water and gives off the impurities. Thus, it acts much in the same way as do lungs of higher vertebrates. When removed from water the delicate, treadlike structure of the gills collapses quickly. It causes the fish to suffocate and die.

Fish as food is delicate in flavor and tender in texture. It is rich in minerals and vitamins and builds bones and teeth, making rich red blood and is easily and completely digested.

MEASUREMENTS—A fish's *standard* length is by custom the distance from "the tip of the snout to the base of the tail (caudal) fin". The *total* length extends the distance of the tip to that fin. Its depth is "the greatest vertical distance from the upper to the lower contour of the body (exclusive of the fins)." The head-length is measured from the tip of the snout to the most posterior point on the border of the gill-cover, exclusive of spines (which may project still further backward). The eye-measurement is the greatest diameter of the same.

(Except as information, usually in prize contests, measurements as above described are not of much value to the average angler. As explained previously, a fish of a definite species may vary considerably with the water in which it lives, its food, currents and the many other factors which influence its growth).

WEIGHT—All anglers desire to know the weight of their catch. Weighing-scales are not, as a rule, immediately available. But if the fish's measurements are accurately made, in the absence of such weighing equipment, a formula may be used for determining the weight:

FORMULA¹ FOR ARRIVING AT FISH'S WEIGHT BY ITS MEASUREMENTS

- (1) Multiply the square of the girth, in inches
- (2) By the length of the fish, in inches
- (3) Then divide the result by 800.

There will be little difference in the weight arrived at by this method and the actual weight of the fish on scales.

Example: The first of 23 tarpon caught on one of the author's expeditions in the 10,000 Islands and rivers south of Everglades was most carefully measured and remeasured by Captain Archie Cass, who was our guest, and by Captain Gregory Lopez, in charge of the trip, and rechecked by Marvin Lopez, assistant guide:

This tarpon was 6-feet, 2-inches long. Its abdominal measure was exactly 33 inches. To determine the exact weight of this fish:

- (1) Multiply 33 (inches) by 33 (inches) equals 1089 inches (square of the girth);
- (2) 1089 inches multiplied by 72 inches (6-ft., 2-in. long) equals 80,586 inches.

(3) Divide 80,586 (inches) by 800 gives the result, 107.32—so the weight of this tarpon was assumed to be 107 pounds. It actually weighed 105 pounds on scales, the difference being probably due to evaporation during the several hours it was towed to port under a steaming sun.

In the next chapter reference is made to the world's record tarpon (caught by Jax M. Cowden). Its measurements were 7 feet, 6 inches long; 3 feet, 10 inches girth. The square of the girth (46 X 46 inches) makes 2116, which is multiplied by the length in inches (90) gives 190,440; this, divided by 800, shows the result (238) in pounds. The actual weight of the fish was 242½ pounds.

¹This weight formula does not apply to all species and has been discarded by some authorities.

CHAPTER SIX

Fashionable Fish Society

- TACKLE AND BAIT**—*Tuna Club Specifications—Long Key Fishing Camp Regulations—Hooks—Lines—Saddle—Bait—Leader Wire—Outriggers—Miscellaneous.*
- TARPON**—*Size and Build—Game Qualities—Habitat—Tackle—Bait—Stillfishing—Charlotte Harbor and Boca Grande—Drifting with the Tide—Trolling (Daytime)—Sarasota Tournament—Moonlight Trolling.*
- SAILFISH**—*Description—Size and Habitat—Feed and Food—Tackle—Bait—Game Qualities.*
- MARLIN**—*General Comment—Worlds, Florida and Bimini Records—Description—Habitat and Sizes—Tackle, Bait and Action.*
- TUNA**—*Size—Records—Coloration—Bait—Tackle—Battling Qualities—Food.*
- GREAT BARRACUDA**—*General Comment—Build and Size—Traits—Persuader—Rebecca Light—Warning.*
- BONEFISH**—*Description—Characteristics—Habitat—Time—Tackle.*
- DOLPHIN**—*Color and Build—Opah—Habitat and Bait—Tackle and Game Qualities—Records.*
- The MACKEREL FAMILY.**
- SPANISH MACKEREL**—*Habitat, Migration and Spawning—Growth and Size—Record Weights—Body and Color—Fins—Game or Battling Qualities—Food Qualities.*
- BONITO**—*Build—Fins—Tackle—Habitat and Game Qualities.*
- WAHOO (or PETO).**
- KINGFISH (CERO)**—*Body and Build—Weight and Length—Habitat—Kingfish Commercial Fleet—No Man's Land—Fighting Qualities—Bait—Tackle—Food.*
- SMALL FISHES for Live Baits.**
- COBIA (or CRAB EATER).**
- JEWFISH**—*Build and Size—Color—Habitat and Tackle—Food.*
- GROUPE**—*Color—Size—Habitat.*
- ROBALO (SNOOK)**—*Body—Size—Habitat and Tackle—Food.*
- REDFISH (CHANNEL BASS)**—*Build and Size—Records—Habitat—Tackle—Food Value.*
- ADVENTURE WITH A MANATEE (SEA COW).**



THE LURE of a deep-sea angling may be divided into three parts: (a) anticipation; (b) participation; (c) reflection. When the devout angler's enthusiasm is stirred to the proper degree every act performed intensifies his interest in the sport. "It is not so much what one does as the spirit in which it is done that has its own best reward." This applies not only to the fishing activity itself but also to the abundance of satisfaction which precedes and follows such ventures.

To crown our efforts with success, we first of all, engage veteran guides. Their familiarity with the territory is well-known. Our expedition commences a day or two in advance of, and continues during the week when the moon is bright and full. Before embarking intense preparation is made; suitable and sufficient tackle and equipment and a liberal supply of fresh bait are obtained. Once aboardship bustling activity takes place: tackle is rigged up, reels are oiled and mounted on carefully inspected rods, and lines scrutinized. Belongings are placed where they will not only be out of the way but quickly accessible when wanted.

The mere taking of game fishes is not our sole object. Only preferred fish-contestants (selected with minute care, because they are prize or record specimens) will be retained. Many will be photographed and a few mounted as trophies. All our other catches, except the ones desired for bait or our own consumption, will be carefully liberated.

Compensating us for the humane act of freeing the victims is the resulting repose of mind. Our privilege will be the observation of members of the fashionable fish world, permission to view, at unexpected moments, their home life, habits, queer exhibitions, beauty, and rich coloring, as well as the key and coral reefs and formations, along with other wonderful elations not permitted the average person. Anglers pass time pleasantly because they are attuned to learning something new. Fascinating thrills and sights are just ahead.

Dr. Charles F. Holder, dean of American salt water anglers, a scientist, who spent his lifetime in the pursuit and study of fishes of all kinds, and author of several books on the subject, such as *Along the Florida Reef*, *Big Game at Sea*, and others, appropriately comments:

"To the world we go a-fishing. Yet the actual catch is far from being the sum total of our pleasures. We never fail to land game; if not fish, some new delight in the appreciation of life and nature. . . . When fish refuse to bite the angler finds solace in a thousand elegant and wondrous works and objects of nature."

We must know in advance as much as possible of the particular game species we seek to engage in battle. Therefore, a brief description of the salient features of prominent generals of the Fish Attacking Army is in order.

Most of the principal members of Florida's salt-water game-fish society, along with one or two species which are not strictly within this classification, are introduced to you in the following pages. The task of enumerating and commenting upon some main features of all sport or game fishes is so pleasant the author of this work must hold himself in check. Otherwise, the endless variety which might be referred to would make this too voluminous.

The information contained herein is the result of several years of patient research, of personal investigations made during adventurous voyages, coupled with observations and original thought. The information has been compiled for the pleasure and benefit of present and future devotees of the sport of salt water and deep sea angling. Obviously, it is expected that those who read it will have some additional and important information which might well be included. If the spirit moves them to advise the author, such comment will be gratefully received for a possible future edition.

For example, unquestionably many fish have been taken which are greater records than those mentioned. In this connection the suggestion of our esteemed contemporary, Erl Roman, who conducts a column in the "Miami Herald" called the "Anglers' Guide", is appropriately quoted:

So sure as we relate the story of a catch of what is, presumably, a record fish, some one calls us on it. In Saturday's column we told of the 149 $\frac{1}{4}$ -pound Allison tuna caught by Rudolph Prins of Dallas, Texas, while fishing with some friends from Capt. Tom Frazure's cruiser *Fish Hawk*. This tuna, we said, if properly recorded and accepted, would constitute a new American record.

Lo, and behold, we had scarcely settled ourself in the office Saturday when Dave Forsyth of Brooklyn, N. Y., called in to inform us that he had caught an Allison tuna here on January 8 of last year that weighed 157 pounds. Mr. Forsyth, who is a sportsman in every sense of the word, was highly puzzled

"How can that 149¼-pound Allison be a record when the tuna I caught weighed more?" he asked. It gives us a chance to explain the why and wherefore of record fish, with the operations pertaining thereto.

To begin with, if an angler fails to record his catch it cannot constitute a record. There is no cost to this recording. All that is necessary is for the fisherman to sign an affidavit listing the weight, girth and length of the fish, where and when caught, by whom, and testifying that it was taken in accordance with recognized angling rules. He likewise specifies the tackle used.

This affidavit should then be sent to the Salt Water Anglers of America, the American Museum of Natural History, Outdoor Life or Field & Stream magazines. Either one of the above named (all located in New York) specialize in keeping fish records. They have on hand data from practically every fishing location in the world. If your affidavit shows your fish to be entitled to a record (and no objections to the recording thereof are received within a reasonable length of time) you are so advised.

In Mr. Forsyth's case, his catch of a 157-pound Allison could have, and still can, be sent in for record. If the affidavit is accepted the fish would constitute an American record. However, he did not send the facts in to the proper authorities and, as a consequence, it does not appear in the records.

As a matter of fact, two Allison tuna have been caught here that weighed in excess of 160 pounds. Neither catch was recorded and, of course, do not show in the list of record fishes.

The moral to this is: When you catch a big fish, be sure and record it. It is up to you—the angler. Fishing is a universal sport. It is practiced in many parts of the world. Keeping records is a big job, but you can do your part by properly recording your catches.

TACKLE AND BAIT

To place deep-sea angling on a uniform and sportsmanlike basis, Dr. Charles F. Holder, previously referred to, founded the Tuna Club in 1898. It is a guide the world over for anglers who seek big-game fishes.

"The underlying spirit of angling", to quote from the Club rules, "should be that it is a sport in which the skill of the angler is pitted against the instinct and strength of the fish; the latter must be given an even chance for its life."

Regulation tackle consists of rod, reel, line, leaders, "elastic" wood (split bamboo especially); some of steel, lancewood, greenheart, hickory or ash.

"VERY HEAVY: Rod—of wood or cane with usual mountings; consisting of butt and tip not shorter than 6 feet 9 inches over all.

“Tip—not less than 5-feet long; not over 16 ounces in weight.

“Line—not to exceed standard 24 thread linen with maximum breaking strain, when dry of 60 pounds; doubled back not more than 15 feet.

“LIGHT: Rod—of wood or cane, with usual mountings, consisting of butt and tip not shorter than 6 feet overall.

“Butt not shorter than 14 inches.

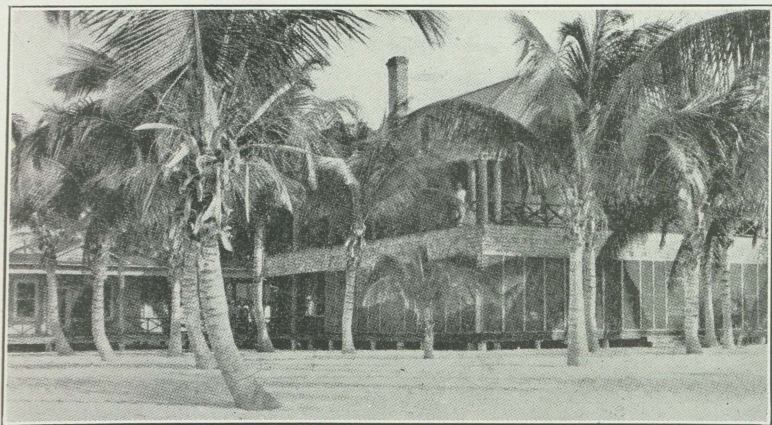
“Tip not shorter than 5 feet; weight not more than 6 ounces.

“Line not to exceed standard 9-thread linen with breaking strain, when dry, not to exceed 26 pounds.

“VERY LIGHT (THREE-SIX): “Rod may be of metal, wood or cane, not shorter than 6 feet overall, with butt not longer than 12 inches. Total weight of entire rod to be not more than 6 ounces. Line not to exceed standard 6-thread linen with maximum breaking strain of 16 pounds.

“ANGLER must bring his fish to gaff (wielded by the captain only) unaided.”

LONG KEY FISHING CAMP—The attraction of deep sea fishing led some enthusiasts thirty years ago (1906) to induce



THE LODGE AT LONG KEY FISHING CAMP

For a third of a century this “Garden of Eden” for devout fishermen was the mecca during winter months of noted anglers. Many assembled here from foreign countries.

The Lodge contained a matchless display of mounted deep-sea and salt-water dwellers, including all the prominent species.

Everything on the isolated key, including the Lodge, the guests’ cottages and storehouses, was completely destroyed by the violent hurricane of September 2, 1935. It is reported that the camp as well as the railroad which crossed it will not be rebuilt.

the Flagler interests to erect, as part of the East Coast hotel system, an exclusive fishing lodge on a tiny barren key island between Miami and Key West. It was called "Long Key Fishing Camp" and was noted for the excellence of the accommodations and service provided. Some of the most distinguished salt-water fishermen in America, as well as from foreign countries, assembled in season (winter months) at this, one of the world's finest fishing resorts. In its lodge rooms were exhibited mounted specimens of most Florida game fishes and other interesting inhabitants of the deep. This sight alone was worthy of a special trip by those interested in the sport.

The dreadful hurricane of September 2, 1935, did so much damage that the cost of rebuilding the Fishing Camp is prohibitive. The storm caused the tide to rise more than fifteen feet over the entire little island. Everything in its path as well as the railroad,—the only means of access to the camp except by boat—was completely destroyed. "Now this noted place exists only in the memorable history of salt-water angling," commented a big-game fish editor. "But the rules enforced by the Long Key Fishing Club, which embrace the ideals of true sportsmanship, remain as definite incentives for all aspirants to develop and perfect themselves in the highest and most approved methods."

One of the principal aims of the Club was sponsoring the cessation of the wholesale destruction of game species such as sailfish, tarpon, amberjack, bonito, bonefish, channel bass, snook and others mentioned in this work. Some of the rules enforced there should be adopted by all salt water fishing clubs, deep sea anglers, captain-guides, and everyone else who loves the sport, as well as those who would like to have it perpetuated for the countless thousands of devotees who will follow us in the future.

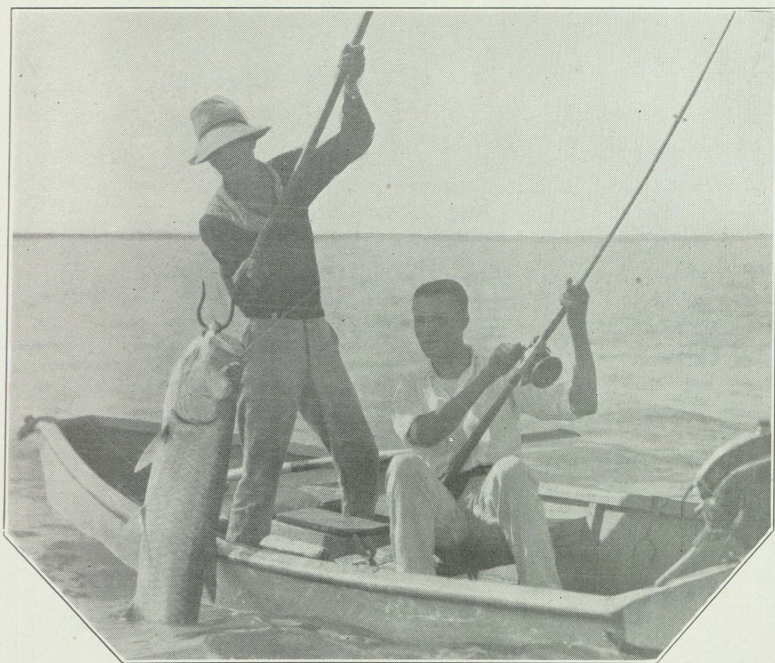
Note: To those interested, the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., will send "Coast & Geodetic Survey chart No. 1250" for seventy-five cents. It shows all the Florida keys from Alligator reef to Sombrero key; gives the exact location and details of channels, depths, bottoms, shoals, keys, reefs, etc., of the Florida straits, the Gulf Stream, Florida bay and other waters around Long Key, as far south as Cape Sable. This area affords the greatest variety of game fishes, embracing the Atlantic Ocean and Gulf Stream on one side, and the Gulf of Mexico on the other.

At Long Key Camp the catches were required to be officially reported, with two members of the Club present upon the weighing in of fish for competition, and tackle used exhibited with the fish brought in.

Tackle specifications for tarpon, sailfish, amberjack, kingfish, barracuda, wahoo, etc. "Rod to be of wood, butt and tip not shorter than 6½ feet overall; tip alone not less than 5 feet in length and to weigh not over 12 ounces; line not to exceed standard 18 threads."

Light tackle specifications: For bonefish and small species: "Rod to be of wood, not shorter than 6 feet over all; tip not less than 5 feet in length; weight not more than 6 ounces; line not to exceed standard 9 threads."

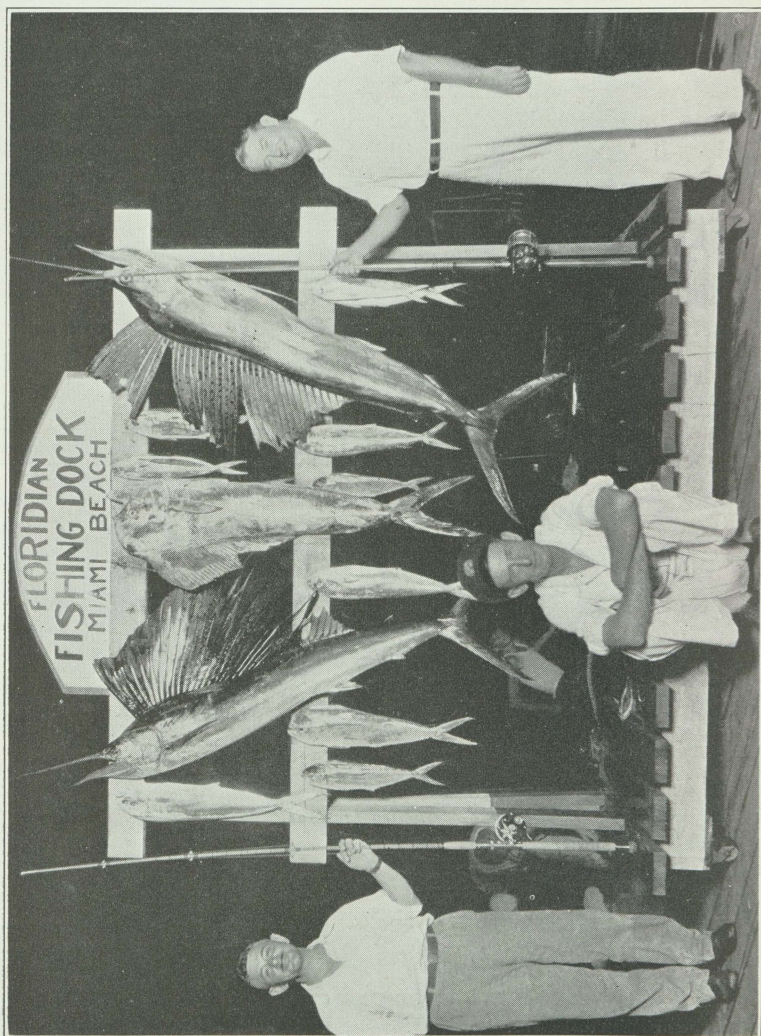
"A broken rod, either before or after gaffing a fish, disqualifies the angler. Fish must be reeled in; the angler must bring the fish to gaff, unaided."



PROPER METHOD OF GAFFING A TARPON

The use of a gaff, even for record or prize catches as well as those to be mounted, should be discouraged. If necessary to use it, care should be exercised so the captured bait-snatcher will not be injured.

(It is the author's studied opinion that the use of a gaff, even for record or prize catches, as well as fish to be mounted, should be discouraged wherever and whenever possible. All



Uncle Maise

Capt. Tim Moore

Gregory

the smaller species can be boated without its use, and the larger genera can be taken aboard with a guide's landing hook, thus preventing injury to the specimen. This requires more dexterity on the part of the captain-guide, who should be instructed in advance that the sportsman-angler prefers it.)

Probably the most certain method of starting an argument amongst salt water sportsmen is to make an emphatic statement that particular weights of rod tips, threads of line and other tackle are best suited for taking various game fishes. Experienced members of the Grand Fishing Fraternity are very much like enthusiastic golfers when discussing golf clubs; they usually back up their preferences with hours of discussion. One writer¹ on gamefishes states that he referred the "light and heavy tackle controversy" to a devout salt water angler. He was informed in response that "it depends upon whether one is a true sportsman or just a fish-getter". We can only repeat our favorite suggestion to use tackle so light the fish's heart beat can be heard as well as felt. In order not to incur any unpleasantness the author does not frown upon a wide range of tackle by the "other fellow".

"The use of a rod light enough to match your brains, and not your brawn, against the cunning of the fish" is the wise suggestion of Erl Roman, who explains: "Quality of flection, resistance of smooth and adequate rod action is not dependent upon the rod's length or its weight; it is a matter of well seasoned bamboo of the right quality and modeling or feel in the hand when equipped with the proper reel and line for the individual rod."

HOOKS—Are made in a wide variety for the different kinds of fish, and variations in design to suit the choice, skill and preference of the individual fisherman. Hooks may be ringed, knobbed or plain ends. Never let a rusted hook touch the line; rust may damage or weaken the line. The method of fishing and the size and kind of bait usually determines the shape and size of hook used . . . Artificial baits, such as feathers, take narrow hooks with long shanks . . . Live mullet (about a foot long) makes fine bait for most of the larger species, and takes a long-shank, well-rounded hook. Crabs take a short full-rounded hook.

¹Van Campen Heilner, *Adventures in Angling*.

A spoon-hook is a piece of shiny or polished metal, shaped somewhat like an elongated domestic tablespoon or shoehorn with a hook affixed to one end. When drawn through the water the spoon's glittering and continuously twirling action attracts the fish.

Fishing spoons are used in trolling for many kinds of fish, especially kingfish, small tarpon, mackerel, robalo (snook), bonito, redbfish, barracuda and reef species.

LINES—A No. 15 line means 15 threads are twisted into one whole. Contrary to general opinion, the lighter line, the better. A heavy line is a strain on the rod tip; when the fish jumps it may break the tip.

A good selection of lines is available. Ashaway, Edward vom Hofe & Co., Gladding and others make cuttyhunk linen lines which prove entirely satisfactory. Also, a choice of colors may be had—olive green (which is usually selected), white, and "invisible tan".

A **SADDLE** or **ROD SEAT** is worn around the angler's waist, and the butt end of the rod is kept in the pocket of the saddle to steady the rod. It enables the angler to keep the necessary tight line on his fish. (See illustration of tarpon tackle in this chapter.)

BAIT—Too much stress cannot be laid on the subject of bait. Not only is the right kind at the right time of paramount importance, but it must be strictly *fresh*. Experienced big-gamefish anglers pay special attention to this because they know how essential it is for success. Bait which is iced too long, or that which is "salted down" loses its firmness, gives off an odor, and diminishes the chances of getting strikes.

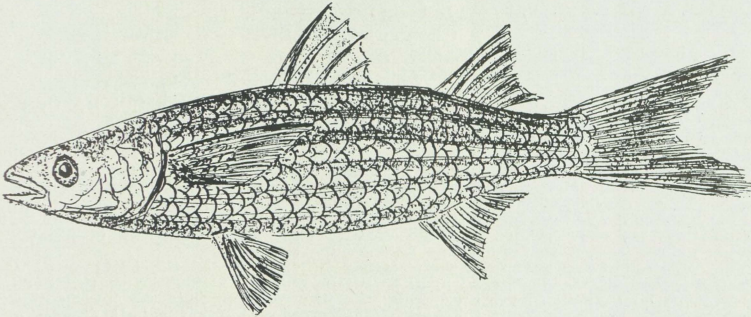
Brief comments on baits preferred for the various species are included in the descriptions of prominent gamefishes in the following pages. Mullet, bonito, mackerel and other fishes with bright, silvery sides and bellies, which can be cut as strip bait, make excellent lures for trolling. This applies to Gulf Stream and reef fishing as well as trolling in channels, passes and protected waters.

Obtaining bait during a fishing expedition of several days duration is a most important but exceedingly difficult problem. The willingness and resourcefulness of both the skipper-guide and mate are taxed to locate and secure *fresh* bait for daily angling jaunts. This is an additional reason for making very careful inquiry as to his expertness in *all* respects before en

gaging the guide. Besides being well qualified because of his intimate knowledge of the waters and conditions where our activities are to take place, the "skipper" must be equally proficient in procuring a sufficient supply of fresh bait, almost daily, so it will always be available at the proper time.

Although it is the *guide's* function to obtain bait, a few remarks on the subject are included here, so that we may know how to obtain it ourselves if an emergency arises.

Mariposes (small 6 to 10-inch long rainbow-hued fishes, such as parrotfish, anglefish, sailors' choice and other grunts, etc.) are obtained by handline fishing from the side of the craft near the shore, or from docks, piers and other projections along the surf. These are kept alive in livebait wells or containers until used (primarily for amberjacks and tarpon).



MULLET
(1/3 average size)

This fish lives a truly miserable existence. When not feeding, its entire life is spent escaping its numerous water and human enemies. Everything in the seas chases and devours it. Commercial fishermen net mullet by the ton. Anglers seek it as choice bait.

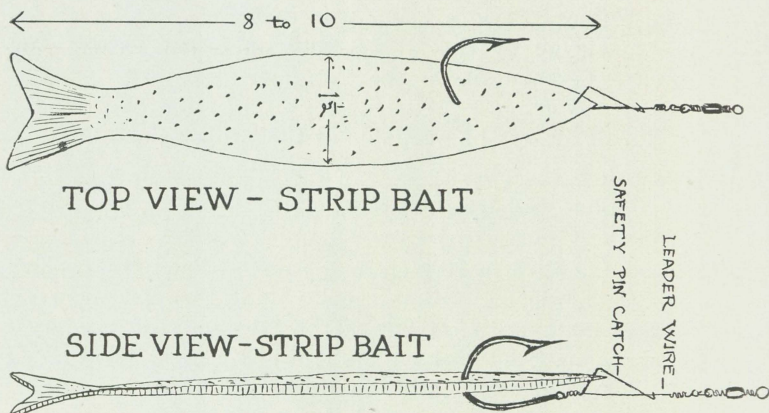
They inhabit temperate and tropical waters principally, but are found in widely separated places. Along coasts, in bays, streams and channels they travel in great schools. The heaviest migration is during summer months.

The body is cylindrical, its white meat covered with moderately large scales somewhat silvery or lead colored, with dark longitudinal stripes along the rows of scales. The mouth is small, toothless and transverse. The mullet reaches maturity in about 2 years, weighs about a pound or more and is slightly less or more than a foot long.

For all salt-water angling mullet is the most desirable bait, either alive or dead. Guides take mullet in nets or buy it at fish-houses in open waters near coasts. The author has taken three or four handline fishing, but such occasions are rare for they do not bite a hook.

Because of its importance as bait, detailed comment on this phase of the mullet is made on the following page.

Mullet usually feed at high tide, in shallow channels and on shoals. They are caught by skilfully casting a circular, corded net (about 12 feet in diameter), the edges of which have lead weights. When it is fully spread out, umbrella fashion, over a



The accompanying illustration shows cut or strip-mullet bait and method of "rigging it up" for trolling. It is prepared as follows:

CUT OR STRIP MULLET

(1) With a very sharp bait-knife, cut the head off evenly just forward of the pectoral and ventral fins. Scrape the scales from the remainder, being careful not to injure or scar it.

(2) Lay the body on a flat board; cut open its belly the full length and remove contents; then insert the knife midway at the severed end and slice the mullet-body "from neck through tail," lengthwise in half, just above its backbone. This results in two complete sides or strips, each having a tail.

(3) Smooth off the headless ends; remove the backbone from the side which contains it; trim the two bait-strips to $\frac{1}{4}$ inch thickness and about 10 inches long. Taper the ends and trim the side edges perfectly smooth.

(4) Cut out the ventral fin; trim and throw away the flesh and flabby part of the bait, so that besides the skin only a neat, smooth coating of meat remains at the center just sufficient to support the skin.

(5) Through a pinhead-size hole (made in one end of the bait) push the "hairpin" end of the leader wire, and fasten the bait; then bring the barbed end of the hook about two inches below the first hole so that the hook's shank rests against the outside of the bait. This method holds the bait steady and makes it "run" flat, without curling, on top of the water when trolled.

school of mullet they become trapped and held by the net until gathered in a container.

Live mullet, 8 to 12 inches long, is the most desirable live-bait for tarpon and several other species. It is hooked through its lips and put out immediately. If kept out of the water longer than a few moments its energy becomes retarded. The larger mullets are kept on ice until they can be cut into strip-bait for trolling.

For sailfish 10 or 12-inch baloa, needle shaped fishes, are excellent as bait. They are obtained in shallow waters on dark nights, a lamp or other light being used to indicate their whereabouts. Frequently they swim near the surface in large numbers; they then can be obtained with a dip-net on a handle. Larger ones can be caught handline fishing, using crawfish as bait.

Crabs are secured by means of a collapsible trap of wire. They are enticed to this with a piece of meat or fish. Live crabs are especially good bait for tarpon when drifting.

Conch-meat cut into small pieces about the size of a lead-pencil rubber, softened with a wooden club, makes choice bait for bonefish. Conch-shells are gathered along the seashore, especially near sandy islands where waves roll over them, half burying the shells in sand. The shell is carefully broken and the live conch removed, cut up and made ready for bait, as stated.

LEADER WIRE—"Specially straightened" leader wire (that is, each strand being perfectly—not partially or imperfectly—straight from end to end) is obtainable from good tackle manufacturers. It comes in packages of a dozen strands, with lengths proportionate to the pound-test and diameter, as follows:

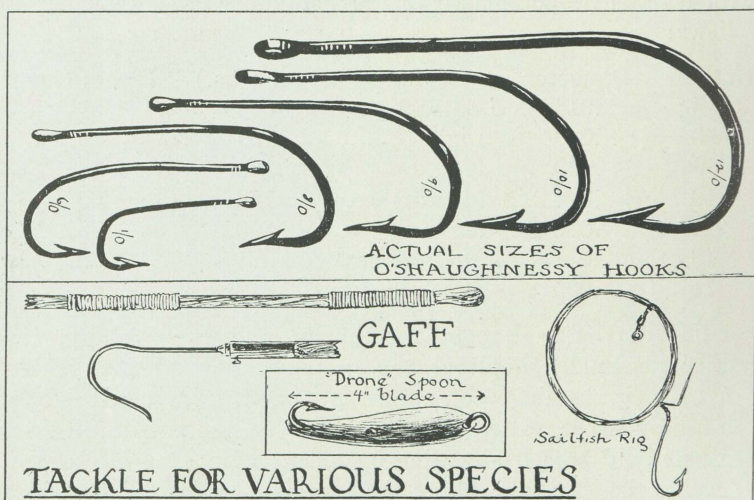
Number	Diameter	Designated	Test (lbs.)	Inches (long)
5	.014	Extra light	56	39
8	.020	Light	109	39
9	.022	Light	136	60
10	.024	Medium	163	60
11	.026	Medium	190	75
13	.031	Medium-heavy	271	75
15	.035	Extra-heavy	332	144

OUTRIGGERS—Except for marlin and tuna fishing, this author personally deplors the growing, now almost general use of long, bamboo poles, one extended from each side of the fishing yacht, called "outriggers". A line suspended from the pole holds the fishing line by means of a snap clothes-pin. It makes the bait skim along the surface—trolled. This brings up the sea dweller, luring it to strike the bait.

This contraption permits more than the customary two fishing lines to be trolled simultaneously. Likewise, it enables the guides to throw more dead gamefishes on the docks, the display enticing spectators to make up fishing parties with the "successful" guides. However, this mechanical method of trolling the bait has definite disadvantages: it robs the genuine sportsman of his only opportunity to get the "feel" and the thrill of the gamefish's initial strike. Instead of the angler skilfully manipulating the tackle, so as to "set" the hook

himself, he remains idly seated upon his swivel-chair fishing-throne until the contrivance automatically performs this rite.

MISCELLANEOUS—A small assortment of swivels—some with pinsnaps and some without—sizes No. 1/0, No. 2/0 and No. 3/0, a guide's landing hook with rope attached; boat-gaff to be used on sharks, rays and other undesirable species which may pick up the bait; a small scale which weighs up to 100 pounds; a 72-inch tape measure, a combination wire-cutter and tweezers, and such other equipment (in addition to rods, reels, hooks, and lines) as the individual angler desires completes the minimum tackle requirements. Extra tackle for unforeseen emergencies should of course be carried.





HAPPY AND CONTENTED! WHAT A LIFE!

The rotted planks thrown platform-like across this coastal key, near Shark River Pass, indicates that once a trapper busied himself in the vicinity. The site was used by us to photograph 3 of 23 silvery tarpon taken in the adjoining channel (July 28-29, 1931).

In channels like pictured above the masterful "Silver-king" is found.

TARPON¹

IS Autocratic Majesty! Caliph! The mighty "Silver King" deserves first mention. *Tarpon atlanticus*!

Few persons know much about this gigantic marine battler. Where does he come from? Where does he go? How large do these fish become? What is the smallest specimen caught on hook and line? When is the best time, and what conditions are considered most favorable to engage him in angling combat? What special tackle is preferable? Is it considered the gamest of game fishes? These and other questions we will try to answer in a general, non-technical manner.

SIZE AND BUILD—Tarpons vary in length from a few inches to more than eight feet long. Their weight may be only a few ounces or exceed three hundred pounds.

The largest of the species reported was netted by commercial fishermen August 6, 1912, near Hillsboro (now Indian) River Inlet. It weighed 352 pounds. But we are interested in those taken by anglers on rod and reel in an "ethical", sportsmanlike manner.

To Mr. Jax M. Cowden, of Midland, Texas, goes the laurels for the world's record; the largest tarpon caught by a sport fisherman. In the vicinity of Panuco River, Mexico, on March 4, 1934, he brought to gaff a 242½ pounder, 7½ feet long, with girth measurement three feet and ten inches. This fish exceeded by 10½ pounds the prize catch of W. A. McLaren, caught in the same locality in 1911.

In the Florida keys, at Bahia Honda, in 1901, N. M. George caught a 213 pound tarpon. And Peter Schutt (now manager of the Casa Marina Hotel, Key West, Florida) caught a 7 ft. 4½ inch long, 47 inch girth, 208 pounder in the Caloosahatchee River, near Fort Myers, October 1, 1916. Tackle consisted of a 9-oz. split bamboo rod-tip; an old-fashioned Vom Hofe reel with 200 yards of 21 thread line. The gigantic fish jumped clear of the water, taking out nearly all the line, seven times. Two hours and fifteen minutes were required to subdue and land it. Seventeen hours after being removed from the water it was officially measured and weighed (by Captain Ed Evans, Ben Tinsman and Ike Shaw).

¹Also designated, savanilla, grande ecaille and silverfish. The negroes of Guina refer to it as the trapoeng.

This tarpon was mounted by Ike Shaw, a taxidermist, and is displayed in the lobby of the Bradford Hotel at Fort Myers. Alongside it is one of the smallest of this species ever caught on hook and line; it, too, was taken from the same waters and weighed only a few ounces, measuring six inches in length. The "baby" leaped a half-dozen times before it was "landed". Another "infant" is exhibited on the office-wall of W. W. Worth, taxidermist, at Miami. G. H. Gleason, of Boston, N. Y., told the author that on Armistice day, 1935, while fishing with his wife he caught with a bait-casting rod in the Tamiami Trail canal, near Everglades City, a 6-inch tarpon, weight three ounces, which leaped several times in its unsuccessful efforts to free itself.

The acrobatic doings of a 4 or 5 foot long, 70 or 80 pound tarpon, furnishes as much sporting excitement as larger ones. Most anglers are contented with this average size, although a 100-pounder is a cherished aim, frequently achieved by many.

Its bodily form is broad, streamlined-elongate and compressed. The female of the species have larger girth measurements than the male. Both are adorned with large brilliantly silvered scales, ranging in diameter from two to three inches, on both sides of the body. This gives the gigantic aquatic fighter the appearance of an ancient, massive gladiator in shining, silvery armour. Its top, for a depth of about three inches down its sides, is a licorice black water-line.

It has a tremendously large head, the inside of which is bony tissue or hornylike substance. The mouth is equipped with protruding, thick, hard lips, and correspondingly immense cartilage-jaws which open wide enough almost to receive a man's head. Mammoth, handsome eyes flash prominently from the top of the distinguished appearing head; when a light is thrown upon them during night angling these eyes are awe-inspiring with their pinkish fire.

About midway of this gigantic, aquatic fighter's body is a high-rising dorsal fin. This is followed by a whiplike fin, $\frac{1}{2}$ to $\frac{3}{4}$ inches in diameter and 8 to 12 inches long. Underneath the body are three abdominal fins, the rear pelvic fin being as large itself as the others combined. The tail-fin is heavily forked, broad and weblike. It is this fixture which gives the tarpon its masterly propelling power, enabling it to whirl up, down or zigzag forward, sideways, in water and

mid-air, all in the fractional part of a second. The entire construction of the tarpon, from its expansive lips to the great tail is such as to furnish it maximum strength and agility.

Tarpon are absolutely harmless. They are also timid, shy and leary. Having lungs they come to the surface, at intervals, to breathe; but are capable of remaining below for long hours. During spring and summer large schools of them may often be seen on the surface, "rolling" or playing, making it possible for anglers to observe them. In this manner they are "hunted" by zealous sportsmen who seek their whereabouts.

GAME QUALITIES—Tarpons have an instinctive complex. As stated, they are extremely cautious, wary and easily frightened away. Immediately they detect the slightest unusual sound or disturbance they dive and either remain below for hours or completely disappear. It is necessary for the greatest degree of absolute silence and inactivity aboard to be enforced when "still-fishing" for them. Competent guides are familiar with these and other peculiar tarpon traits. They also know the most favored methods of capture and release.

Because of the tarpon's imposing dignity and stupendous battling achievements, such as his power of suspension in mid-air for what appears to be considerable periods—the most remarkable antics known to sportsmen—it is far-famed. His undisputed reputation for battling to a finish gives the tarpon a distinct appeal to those undertaking this man-sized sport. The magnificent thrills he furnishes justifies the belief that this species was created exclusively for us.

If you are determined (and infected, like the author and enthusiastic anglers who come from all parts of this and other civilized countries to tarpon-fish), you may spend many exciting days trying to capture a "Silver-King". You are fully warned, in advance, that in action the fish is equal to any man's strength. Once engaged, it knows no fear and yields to no rival. For wearing out human energy the tarpon is in a class by himself.

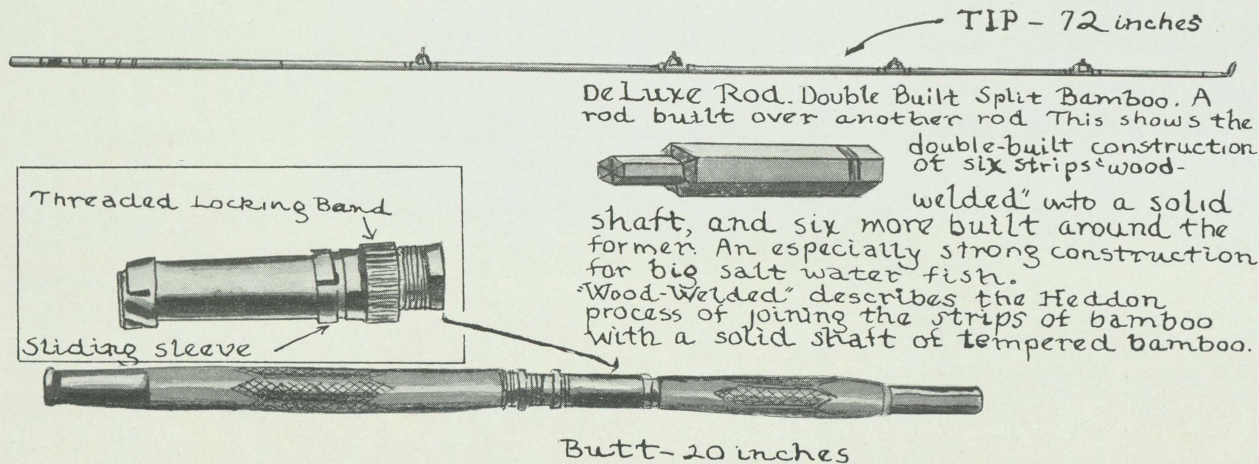
HABITAT—The tarpon is a bewilderingly arrogant cosmopolite. It is partial to warm waters, salt as well as partially "fresh". In mid-winter it may be found around Tampico, Mexico (Panuco River and similar streams), and off the coasts of Central and South American seas and inlets.

At the first signs of approaching spring they migrate, traveling north in immense schools. Their long journey takes them first into the Caribbean seas, where they loaf along until about March, then they invade the channels of the Florida keys. Some go up the East Coast to Fort Lauderdale's numerous river, bay and canal waters. In mid-summer tarpon run along the entire East Coast. N. P. Hill, Jr., of Birmingham was justifiably thrilled when he captured a 139-pounder in 1934; and Lamdin Kay, WSB radio station's manager from Atlanta claims he almost succumbed when 117½ pounds of mighty, meteoric fish exposed itself after violently contacting his bait. These are examples of hundreds of similar catches in the Daytona area. Below Miami they visit such places as Barnes Sound, Tavernier Creek, Lignum-Vitae Channel, Trestles No. 2 and No. 5¹ at Long-Key, Tom's Harbor, Sister-Creek, Grouper Channel, Bahia Honda and similar haunts. A month later they have invaded the peninsula's southern tip and the west coast from Cape Sable north as far as the Caloosahatchee river (at Fort Myers) and farther up the coast. In summer Monroe and Collier county passes, inlets, channels, rivers and multitudinous lagoons, bays, etc., bordering the lower Florida coast, west of the Everglades, and the coastal waters of the Gulf of Mexico are literally infested with them and their breed.

During spring and summer months great schools of tarpon remain in this region. They can be found in plentiful numbers in the Caloosahatchee river, Estero and San Carlos bays near Punta Rasa and Fort Myers; Gasparilla Sound, Captiva Pass, Boca Grande Pass and Charlotte Harbor near Punta Gorda; Venice and Sarasota Bay at Sarasota; and other places up the West Coast as far as St. Petersburg are equally as thick with tarpons. Wherever there is an abundance of natural food, such as crustaceans, mullet, and the like—particularly in the *Ten Thousand Islands*—there tarpon will likely be found in great numbers, moving about as influenced by mood and food.

All of them, however, do not congregate in the places mentioned. About mid-summer thousands upon thousands feeding together move up the Gulf of Mexico, bending westwardly along Florida's coast-line. They make brief stops at channels and Gulf waters of Pensacola and Mobile, continuing until they arrive at the Texas coast, between Brownsville and

¹TRESTLES No. 2 and No. 5—To construct the Overseas railroad, the intrepid engineers built a series of viaducts on huge piers to span "open" waters connecting the keys. Underneath these the natural flow of tide-waters pass in channels. Originally these trestles were designated by numbers for construction purposes. The heavy currents, waves and other elements washed silt and the like into some of these water passageways partially filling them up. As the result the ebbing and flowing waters force themselves through the available places at furious speed, sometimes 20 or more miles per hour when the tide runs heavy. This brings into the channels a quantity of varied fish foods. At trestles No. 2 (above) and No. 5 (below) in the Long Key vicinity tarpon are found in the channels in large numbers during early spring months.



Heddon's Rod for Tarpon and Big Deep Sea Game Fish

Aransas Pass. So that, generally, during July and August they are fully represented on the entire circuit from the Florida Keys near Cape Sable to the Texas coast. Numerous places along this favored route form the mecca for devout tarpon fishermen.

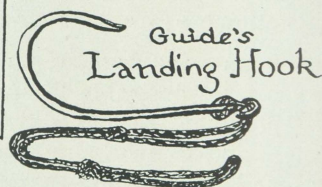
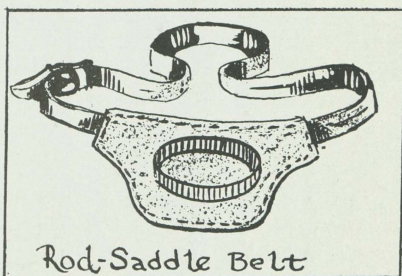
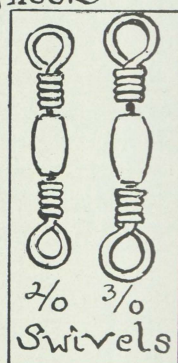
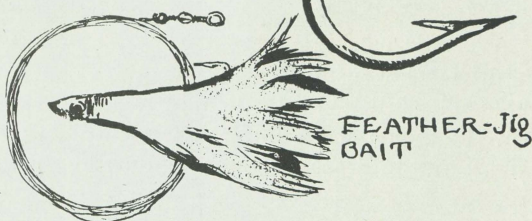
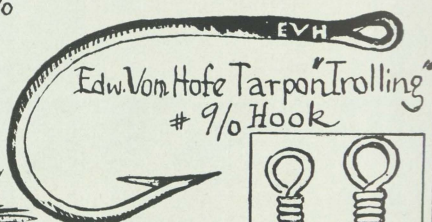
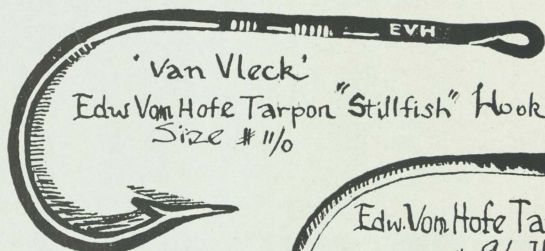
Hundreds of small tarpons—weighing from 5 to 20 pounds—may be seen during the summer “rolling” in the protected, brackish waters in narrow creeks, mangrove-island lagoons and shallow places in the Ten Thousand Islands as well as in the Tamiami-Trail canal. They afford great sport stillfishing with cut mullet or fiddler crabs; and the action is lively and fast when casting with artificial lures (plugs, spoons and feather-jigs).

Approaching cold weather sends them speeding south to their winter retreats with all possible dispatch. They spend the winter again in the warm waters of the Caribbean, South and Central Americas, and migrate again the following spring.

TACKLE—There are several methods, all approved, to angle for this valiant, pompous marine dignitary. Various enthusiasts and the experienced guides may differ somewhat in technique, some preferring certain procedures while others find different practices successful. Tackle requirements are about the same in all places. A general idea may be had from the following:

ROD—A good quality, 6-ply, solid section rod of split bamboo is most desirable to enable the angler to enjoy the effect of “playing” a hooked-fish. Its tip should weigh about 9-ounces and be in a single piece. Two-piece tips are liable to become broken where they are joined. The tip’s length usually is about 5½ feet, fitted with mountings of agate for the tip’s top and guides. Some do not like agate because it may chip, but it certainly will not rust and spoil a good line. An 18 or 20-inch butt, weighing from 10 to 12 ounces, fitted with screw-locking reel seat and water-proofed ferrules to balance the outfit, may be either cane-wrapped or of gunstock design.

REEL—Without any intention to boost particular makes of reels, there will be little argument forthcoming if a “Universal Star” (made by Edward vom Hofe & Co.) or Pflueger “Atlape” reel, size 4/0 or 6/0 is used. Not less than 600



Used where fish are not gaffed. The Landing Hook is inserted in mouth of fish, the head lifted and both hooks removed; and the fish allowed to go. Hook is 7½" long, 3" wide, extra heavy

TARPON FISHING TACKLE

feet of line should be comfortably carried on the reel regardless of the make, and it is even better to have 750 feet on these reels.

LINE—Because it is less expensive to replace a broken line than a rod tip, experienced tarpon-fishermen use about a 12-thread, or possibly 15-thread line. In action the tackle is required to take heavy punishment and if anything is to “snap” under the strain it is, perhaps, better to let it be the line than the rod. At any rate, it is less expensive to replace the line. For those who are not experienced, however, no harm will be done if they use a heavier line, about 18-threads, being careful to set a “light drag” (brake) on the reel.

HOOKS—Tackle manufacturers recommend many kinds of hooks for this particular species. The author has found it desirable to equip himself with a few dozen hooks made in England of Sheffield steel, trade-named “Van Vleck”. They are obtainable from Edward vom Hofe & Co., New York, or their dealers. For trolling, or drifting with the tide, a short-shank hook, which has a penetrating barb-point and an oval eye, size #9/0 is used. If a stillfish hook is to give best results, it should be about a #11/0 or 12/0.

FISHING BELT—For assistance and comfort in action, the angler may use a leather “saddle”, mounted on a belt which fits around his waistline. This is quite desirable, for it enables one to rest the end of the butt when battling a tarpon.

Most guides have all the tackle and equipment required, and the boat-charter fee (ranging from \$20.00 to \$30.00 per day, depending on the equipment furnished, yacht, locality, etc.) ordinarily includes everything necessary for a party of two to four persons who divide the cost between them.

Because the author is left-handed, he must have his reels built to order. He takes along a roll of about 100-feet of special rustproof wire, .026 diameter, for “leaders”, along with a varied assortment of other fishing apparatus and personal effects. Ordinary leader wire rusts quickly and may damage the line if they contact.

BAIT—For keeping live baits a “Juergens” floating, folding net will be found invaluable. It cannot be too strongly emphasized that *fresh* bait is essential for success. Satisfy yourself before leaving the dock that a liberal quantity is aboard. It is the least expensive item of the trip. Live baits, such as

crabs, grunts, mullets and other small species can be secured by the guide if he is given a day's notice in advance. If live bait is not obtainable, dead—but freshly caught—mulletts will serve the purpose provided they are kept well iced.



We become endowed with refreshed vigor while we "unlax". We are recreated, re-spirited and enlivened. The tackle is inspected . . . and if satisfactorily done we are almost ready for instant action.

STILLFISHING—Genuine, true fishermen have instinct and imagination. Visualize yourself now aboard a 28-foot cabin cruiser. We leave the docks at *Everglades City* (85-miles west of Miami, off the Tamiami Trail). It is about 4:00 o'clock in the afternoon. We have been told that early morning and late afternoon are excellent times of the day for tarpon to strike, the heat of the day not being nearly so good.

We are headed for the mouth of *Lostman's River*, where it passes into the Gulf, about 25 miles south of our starting point. During the two-hour journey down to this "point", we "make up" tackle. (1) We "let out" about 250 feet of line, allowing it to soak as it trolls behind the moving boat;

then (2) the thoroughly wetted line is wound as tightly as possible on its accustomed place on the reel. Next (3) the free-end of the line is drawn through the agate-guides on the rod tip. Now, (4) we cut off about 8-feet of leader-wire. On one end of it we fix a #3 bronzed-barrel swivel; on the other end we attach a #12 "Van Vleck" stillfish hook. The "free" end of the line is "looped" through the unoccupied end of the swivel, making it fast, we having previously "doubled" about 2 or 3 feet of line by tying the end back to accomplish this. The whole is inspected and if satisfactorily done, we are almost ready for action.

Quietly as possible the craft is allowed to drift into a chosen spot and anchored, the forward end of the boat tied to a mangrove branch, with a pole stuck into the river's bed some 10-feet, to which the back end of the boat is fastened so it faces the "open" water. A live-grunt, yellow-tail, mullet (or whatever species has been supplied) is taken from a live-well or container. Just above its backbone the hook is drawn in and then out of it in such manner that it is injured as little as possible, and it is allowed to swim out, carrying behind it the leader-wire and some 40 to 50 feet of line.

In the absence of livebait, a freshly-dead mullet 10 or 12 inches long is cut about $\frac{1}{3}$ from its head—smoothly severed so one part forms little more than the head, the remainder being the body and tail. Before attaching the swivel to the wire-leader as explained above, the skipper-guide draws the wire-leader through the length of the mullet's center, along its backbone, with the barb of the hook resting against and just sticking out of the smooth-end, pointing backwards towards the bow of the boat. For still-fishing, instead of using a leader wire as described, it is desirable to use about 2-feet of soft, flexible airplane wire. When the bait is taken into the tarpon's mouth he does not immediately discover the ruse, because the airplane wire is soft and evidently deceives the victim into thinking, perhaps, that it is an unusual fin or something similar. Dead bait has to be cast out some 60 to 70 feet, whereas live bait swims about, as described. Then some 15 or 20 feet of line, additional, is drawn from the reel (which is made "free-spool" by the tension being released) and the whole is allowed free play. Mr. Tarpon can now pick up the bait and take his own time to swallow it, if he be so inclined, without being frightened off. As he

accomplishes this, the loose line, which we have coiled at our feet, or on the edge of the boat moves out in response to the activity beneath the surface.

From now on every moment is tense. Everything now is set and it is up to the mood and acts of the tarpon. More than once the loose line moves out but only a foot or two goes overboard. Perhaps, a breeze or the current is responsible. It may be a small fish that is nibbling on the bait. Or, in some instances it is a shark, which we trust is not the case because it will spoil our chance to get a tarpon. If a shark should pick it up we make short work of him. We rebait the hook and wait.

The line again moves out a few feet—and stops. Nothing happens. But we notice on the far side of the channel that tarpons are entering the pass. They “plop” on the surface, exposing their handsome bulks as they “roll”. Instinct warns them to come no nearer than a hundred yards of our craft. Their arrival is gratifying, even if they do not remain long in the vicinity. It indicates we have selected a likely hole for a strike. An hour passes. . . . We become less vigilant; our thoughts wander.

Shhh! Look! A huge tarpon turns in the direction of our lure. He must be seven feet long if he is an inch! He dives to investigate!

We wait in vain for this greatly desired tarpon to “pick it up”. After a fifteen minute period we conclude that he is not interested. It is not long afterwards, however, before another repeats the diving action. Nothing happens, and we relax again; this time we adjust ourselves to more comfortable positions, with the rods held loosely in our laps, or we simply lay them across the bottom of the boat away from the loose line. We “feel” the reel, make sure the tension is free, adjust the loose line to suit ourselves, then let our thought drift to scenes several hundred miles away. The inactivity makes us drowsy.

A gentle tap on our shoulder brings us out of our reverie. A finger points to the line. It is moving out, slowly, slowly, slowly! Gradually all the slack is taken up. Evidently, the bait is being swallowed; so we take up the rod easily, rest its butt-end in the saddle, point it straight from our shoulder towards the underwater activity, holding it until the line becomes taut with the rod and reel. Then, we throw the

tension-lever "on" so as to "set" the "drag". During this tense period not a single word is spoken; not a movement is made by anyone aboard. Eager human eyes are strained to get a fleeting glimpse of what may follow. Special efforts are made to restrain the natural human impulse to exclaim. Fingers touch lips to guarantee perfect silence. The man behind the rod arises and stands at rigid attention, firmly gripping the rod. The companion-fisherman who sits next to him has reeled in his line and moves to the rear, so as to give the busy angler plenty of space to perform his mission.

In a flash comes to our anxious mind the thought that, when still-fishing for Tarpon, several ill-effects are possible. For example:

(a) The first act of the tarpon will be to clear the submarine world by several feet. As he rises in mid-air his massive head is shaking like a leaf in a wind. This is intended to enable him to disgorge the hook and throw it clear away from him. In 8 out of 10 instances he will succeed in doing just that.

(b) If he does not throw the hook, he purposely stirs up the surrounding waters to warn other possible catches of lurking danger. Should he do this simultaneously with releasing himself from our hook, there are but two alternatives: either wait patiently until the disturbance is without effect, when the fish in the channel have gone and others come in to take their places in deep holes, or else travel 20 or more miles to another likely "hole" where the fish have not been disturbed.

(c) The intended victim may completely swallow the bait. In this event his effectiveness is rendered less than desired; for, with his strength thus diminished his fighting powers are too early spent.

Thus we reason at the crucial moment!

* * * * We are called from the disturbing thoughts by the skipper's excited yell: "Sock it to him! Jerk his head off!" Your companion, too, is unable to control the urge to put in a timely suggestion.

Without knowing how you did it, you have given the rod a sudden tilt upwards, as though you intended bringing the thing over your shoulder. It is accomplished with such positive force that the steel hook is driven into the tarpon's hard,

bony mouth. You have made the strike at the proper time, and with a lateral motion. Practice and loss of many a prize fish has enabled you to achieve perfection at last. Fully 85 per cent of such strikes have been "lost" in the past, much valuable tackle has been broken, and lines snapped, but we have now redeemed ourselves. Luckily, in this instance, our patient efforts are rewarded.

Out of the depths springs the big, overpowering monster! He turns and twists and zig-zags up there, in the stratosphere, makes a couple of complete rounds, shakes his gigantic head furiously and all but tears the line asunder by repeated violent jerks; then, he flops back into his native habitat with such a resounding whack that spray is splashed all around. We gasp unconsciously! "Whew!"

Before we realize it our line peels out with bewildering speed. It is a few seconds before we comprehend exactly what has taken place, our predicament being indicated by the peculiar look of sadness and gladness—mixed emotions—registered on our countenance. A meaning glance is turned towards the skipper and your companion for help . . . but there is no help forthcoming! It is up to us and Mr. Tarpon, just the fish and the man, for no one can or would turn a finger to assist.

* * * * You are left to struggle, alone with your game. He is using all the tricks known in his trade. You hang on for dear life . . .

Those who have tasted success in tarpon-fishing declare it to be the most exciting and thrilling of all contests. One devout lover of it declared it is more fascinating than lion stalking. The author does not know anything about lion-stalking but agrees with the remainder of his claim.

Another way to comment on this still fishing is to recall the words of the negro who was hailed before a city recorder's court for wife-beating. Asked by the judge what caused the trouble, the defendant's wife explained to "hizoner":

"Thet nigger just beat me and beat me and beat me."

"Well," inquired the judge, "what did you do then?"

She thought a few moments, then replied, "Lordy, yerhonner, I just had ter 'low him ter beat me some moh!"

When you have landed one of these giddy monster-fish you may not admit it but you have taken a severe lashing.

There are occasions when a dutiful guide will give you some little relief: he may start up the boat-engine and allow you to drag your intended victim out to open water, where there are no hazards such as overhanging mangroves or shallow bars in the river's bed to cut your line. Otherwise, you'll have to take the consequences, since you came here of your own free will and accord.



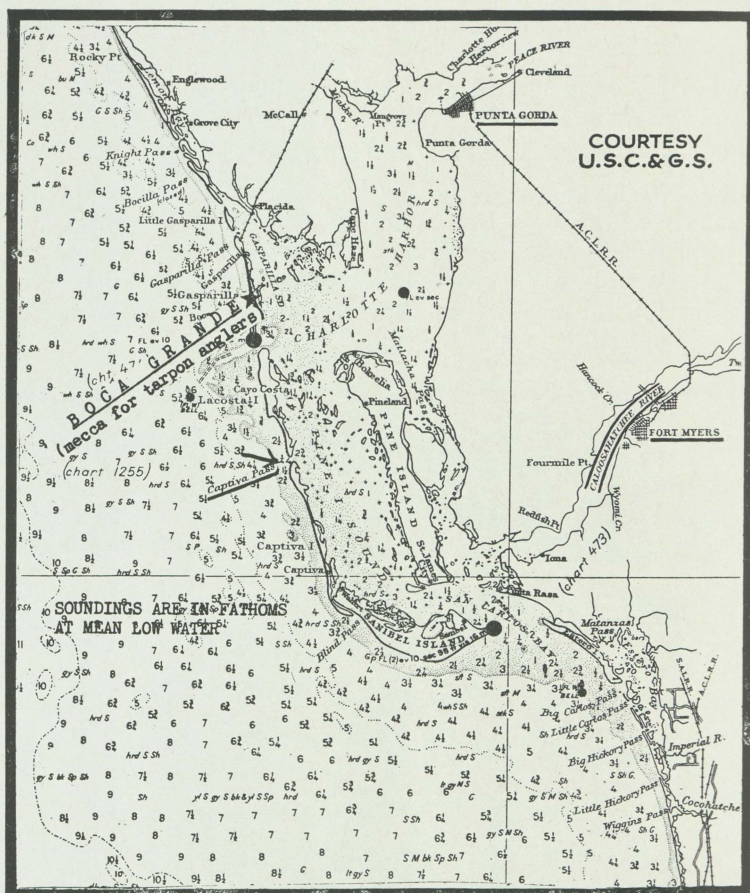
(left)
The author

(center)
Capt. Archie Cass

(right)
Capt. Gregory Lopez

WEIGHTS AND MEASUREMENTS ARE TAKEN

A ferocious shark appeared apparently from nowhere and with two bites consumed about 40 pounds of our hard-won victory.



Charlotte Harbor, Boca Grande and Captiva Passes, the Caloosahatchie River and Other Tarpon Haunts

More tarpons are caught each year by anglers in these waters than in any other place. It is only a 10-minute boat-ride from the hotels to fishing locations at Boca Grande Pass.

The Boca Grande Tarpon Tournament Club (Jerome Fugate, manager) advises that the book record of the tarpons caught there with rod and reel during the past four years shows:

In 1932—1848; in 1933—3685; in 1934—1857; in 1935—during May 1225, and during June 1294.

At Sarasota (just above the region shown) an International Tarpon Tournament is held each season (May 15 to July 31).

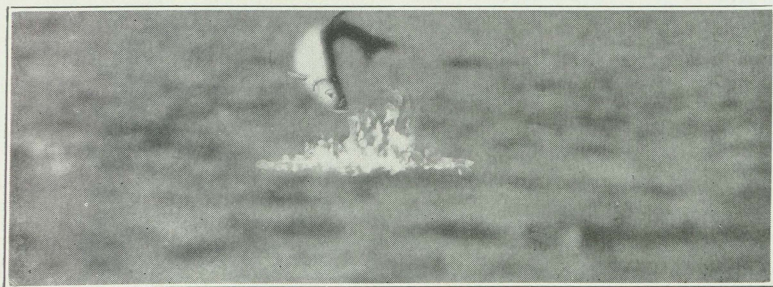
Further north on the West Coast, the St. Petersburg Anglers' Club sponsors a Tarpon Round-Up June 1 to July 31.

DRIFTING WITH THE TIDE—For those who do not care to engage in the pleasant duty of shipping down assorted equipment—rods, lines, reels, hooks, leader-wire, belt-saddles, scales for weighing the catches and numerous and sundry items of tackle and accessories; also for those not equipped with the necessary paraphernalia, luxurious fishing yachts, mastered by veteran guides who “know their tarpon” are available for charter at \$15.00 and \$20.00 per day for the two tides at the Boca Grande Tarpon Fishing Club. Regulation fishing tackle—consisting of rod, reel and line—may be rented at \$2.00 per person daily. Similar arrangements can be made at Sarasota. Comfortable hotel accommodations are available at \$3.00 per day and up, American plan.

The yacht is navigated out into the Gulf of Mexico, several miles offshore, when the heavy morning tide is about to run inshore. A live crab is affixed to the hook, (otherwise the tackle is as already stated) and trolled behind the boat which is carried towards the shore by the tide. About sixty feet of line is behind you, while you are complacently seated (at least temporarily) aboard.

After several drifts towards land and alternate runs outside again your hopes begin to diminish.

Then suddenly, apparently from nowhere in particular, you are ruthlessly jerked almost out of your seat. A greedy beligerent has grabbed the crab! The flashy sea monster sails skyward. His prowess is exhibited with wild, perplexing, vicious leaps. The never-to-be-forgotten battle is on in earnest



—Jerome Fugate

MORE THAN A BATTLE—ITS A SPECTACLE!

Upon finding himself attached to the angle-hook end of my contrivance the key-twister hurdles into atmospheric regions, ten or more feet above the surface. Head twisting, tail dancing, it resembles an immense bar of molten silver.

if the first "jump" or two is made and the hook remains securely in the tarpon's mouth. The execution of these startling maneuvers make you feel as though your eyes deceive you—so it appears! The gyrator of the depths acts as though a charge of dynamite exploded under him and shot his pompous greatness above the surface—ten, and even fifteen feet! What a sight!

For possibly the better part of an hour the reckless silvery giant performs more astounding feats of strength and showmanship. His actions and location change so rapidly that you nearly forget your fixed desire and intention is to capture this brilliant opponent. His exploits are accomplished with the ease and grace of a Japanese juggler on a vaudeville stage. Each of his movements register in the quivering tip of the sorely taxed rod. During this tedious and strenuous period your own strength diminishes. Perspiration covers your brow and physical make up. You become not only tired and uncomfortable, but utterly exhausted and completely baffled.

After what seems an age the thrill of a lifetime pays you visit—the marine attacker turns over on his side; you reel in line with all your remaining strength. When the fish is brought up to the boat the skipper-captain obligingly reaches over into the water and takes your enemy in charge. Almost overcome by the fatigue incident to the over-exertion you are permitted to recline aboardship while the craft returns to the docks. It is even excusable if you sneak up to your hotel room on some pretext (so you can flop onto the inviting bed and relax while your heartbeats return to normal). A call for luncheon will fetch you down in time to go out again into the Gulf for an afternoon's sport on the second tide.

With pardonable pride your pent-up emotions will cause you to recite (to the first person you meet) how you conducted yourself during the morn; the exact size of your captured tarpon; how you bravely clung to your tackle, notwithstanding the marine tormentor's efforts to drag you from your fishing-perch; the spectacular leaps which impressed themselves upon your memory, and so on, ad infinitum. Gestures—not to mention words—to illustrate tail-spins flow with a recklessness that causes you to live again in the undreamed heights of pleasurable sensations. All this is a tarpon fisherman's privilege.



—Key West Adm.

For miles and miles around Key West, the southern-most point of civilization under our flag, the waters are alive with several hundred kinds of food and game fish. While sojourning there in winter months thousands of persons test their skill in sportive combat with the mighty "Silver-King" and other species.

TROLLING (DAYTIME)—This is the sport of the gods! It is best on high-rising tides.

A strip of cut mullet is neatly trimmed to a quarter-inch thickness, being about eight inches long, the ends tapered so its action in the water when trolled will resemble a fishlet, one that is injured. This lure is affixed to the hook so that all but a couple of inches are free to dangle; the upper end of the bait being hooked to the leader wire so it will "run" (troll) smoothly. About 50 to 60 feet of line is dragged behind the boat, the speed of which is limited to about three miles or less per hour. A short shank, #9/0 Van Vleck tarpon hook is used for this.

It is not long, we hope, before an inquisitive tarpon picks up this bait. When the choice morsal is in its mouth anything is liable to and frequently does happen. From that moment on your skill is brought to the test. The intense activity starts after the first rude jerk notifies you of the strike and may last from one-half hour to a couple of hours or more. During the action your senses and hands are kept busy and your skill in manipulating tackle is tested to the utmost.

The nature of this fish causes it to start off with a wild leap; he hurdles into mid-air as soon as the contact is made and he feels the "steel splinter" touch his jaw. In that respect he resembles an immense bar of glittering, gleaming silver, longer than a telegraph pole, while the bright sun rays play on his whirling bulk. Next, perhaps, the whimsical nautical tormentor runs off with the bait, stripping a couple of hundred feet from your heated reel. These are merely the beginning of some of the most spectacular and exciting displays you ever beheld. The assaulter of your bait leaps, runs, dives and sulks—several pages of descriptive comment could not adequately picture to the uninitiated the erratic behavior of the stalwart fish under these conditions. It must be seen, to be understood and appreciated, by one who manipulates the rod and reel.

If the boat's motor is cut off the fullest effect of the battle can be had. This makes the situation even more strained and tense for the angler. Within a few minutes your arms feel as though they are being jerked loose from their sockets. A single combat under this condition with his titanic lordship, the tarpon, is considered by everyone who has thus met him an all-

time record experience. It forms its own monument in the precious portfolio of cherished memories.

SARASOTA TARPON TOURNAMENT (May 15 to July 31, annually)—This is open to everyone who becomes a member of the Sarasota County Anglers' Club (dues \$1.00 per year), a non-profit organization, the object of which is true sportsmanship. The club offers prizes for tarpon caught with three classes of tackle—light, medium and heavy.

(a) **LIGHT TACKLE:** Consists of any make or size reel; rod-tip weight not more than 9-ounces; line not more than 12-threads.

(b) **MEDIUM TACKLE:** Consists of any make or size reel; rod-tip weight not more than 9-ounces; line not more than 18-threads.

(c) **HEAVY TACKLE:** Consists of any make or size reel; rod-tip weight or description any kind desired; line not more than 30-threads.

Any tarpon recorded in the Sarasota Tournament must be caught by the angler; the rod must be in his hands from the time the fish is hooked until it is brought to the side and boated by the guide. To record a tarpon the angler must bring the catch to the Sarasota Tournament headquarters on City Pier. The catch must be duly weighed and a record of same made, full information given regarding tackle, etc., a sample of the line used attached to the tournament card, and said card must be duly signed by the angler, certifying to the facts as given and witnessed by both the guide and weighmaster. The card is in duplicate, the original being held by the Anglers' Club and a copy given the angler.

Courtesy shown by anglers to each other makes the sport more enjoyable and produces better fishing. Therefore, each angler is requested for the sake of good sportsmanship to observe himself, and require his guide-captain to observe the following suggestions:

(1) Maneuver the boat as quietly as possible when in a school of tarpon. When one is hooked pull the boat off quietly to the side, and "lay to" while the angler plays the fish and it is boated.

(2) It is unsportsmanlike to drown a fish by dragging it in the water before it is boated. However, the boat may be

maneuvered so as to assist the angler in keeping the fish from diving under the boat.

(3) When an angler who is "plugging" comes into a school of tarpon being fished by others using live bait, he should immediately change to fishing with live bait or promptly draw away from the school; and when coming into a school being fished with artificial bait he should employ the same means or withdraw from the school.

(4) When coming into or leaving tarpon waters where another person is fishing, the angler's boat should be so maneuvered—slowly and quietly—as not to disturb the sport of his fellow fisherman.

(5) The following acts disqualify a catch in the Sarasota Tournament:

The use of harpoon, lilly iron or lance; shooting of fish; throwing gaff at fish; use of more than one hook (no hooks in tandem or gang hooks allowed); use of gaff over 9-feet long or line loop more than 10-feet; breaking a rod while fighting a fish (fish will not be disqualified, however, if the angler lands the catch unaided); having the fish injured in any way by a shark, before or during its being boated.

MOONLIGHT TROLLING—Voyaging in quest of knightly adventure in the *Ten Thousand Islands* on clear, moonlight nights (especially during June) is the preference of the author and his devout angling cronies. Moonlight furnishes an added attraction. The conditions in many other respects are also ideal. It is equaled by the eccentric tarpon's performance, which can but partially be observed. The combination of bright, clear moonlight and a huge tarpon's showmanship causes feelings of such intense joy that mere words are incapable of describing it.

Because of the inconvenience of reaching and remaining in these out-of-the-way haunts, preparations are made for spending several days and nights aboardship. There is no place for us to land in the *Ten Thousand Islands*. Food ingredients of such a nature that they will not spoil are carried on the week's excursion into this watery wilderness. Guns and ammunition are also on board so that, if it becomes necessary for our existence, we can shoot wild game, principally birds, first having obtained special permission from the game warden.

Moonlight trolling is reserved for the High-Priests of the Grand Fishing Fraternity, who time their actions when the

rivers south of Everglades City will be as full of tarpon as the proverbial dog is of fleas. In the past few years, when mullet schools were abundant, we have seen Lopez, Hustons', Chathams', Lostmans, Rogers, Broad, Harney and Shark Rivers, or at least some of them, jammed with the thousands of silver-kings seeking the refreshing river waters. They splashed, spattering spray and making characteristic noises for miles around. When large schools of tarpon "roll" in this manner, it does not always indicate that they will strike, because they may not be feeding then.

Tarpon are both surface as well as bottom feeders.

For night expeditions the lure is principally a "feather jig". It has a "head" of aluminum (preferred, because, it is light weight), although lead-heads are used when it is desired to troll the bait very deep. (Red—not pink—"eye" are preferred). This "head" is made with a hollow groove (just large enough for the leader-wire to pass through) and attached to it are white feathers, neatly bound and secured. The size 9/0 Van Vleck tarpon trolling hook is then made fast to the leader-wire's end and hides itself to some extent in the feathers. At the other end of the leader-wire (6 or 7 feet long) a No. 2 or No. 3 bronze swivel (painted black) is affixed. This permits the bait to turn without unraveling the line. To the other end of the swivel 18-thread line is attached. A 12-ounce rod tip is used, being heavier tackle than employed otherwise because during the night the action must be *felt*, as already explained, and appropriate firmness applied when the circumstances demand it.

All other methods fade into insignificance when compared with night-fishing because the cool waters (especially around midnight) enables the powerful marine acrobat to exhibit most of his extraordinary powers and stunts. The watery Hercules displays the agility of the panther and the alertness of a wartime sentry. He flings himself repeatedly towards the moonlit sky. A friend of ours described it thus: "If one of the new, super-modern express trains of aluminum could perform a ballet dance in mid-air it would not be more spectacular than a single tarpon's unusually sensational actions during the great battles in the wee morning hours."

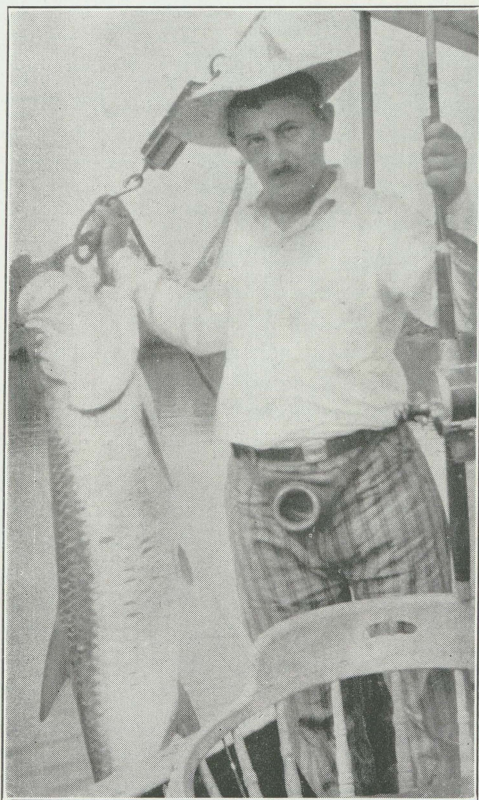
Notwithstanding heroic efforts to hold him, the gigantic fish frequently liberates himself by disengaging the hook after

the first or successive jumps—it may not have been sunk into his mouth, or the line may be pulled out by the movements of the fish and some slack permitted in spite of determined efforts to prevent it; or the intense strain and friction may sever the line while the fish is engulfed by the sea or above it. Any of these bring chargin to the manipulator of the rod and reel, for it usually is a prize fish which “gets away”. A more tragic happening is to have uninvited prowling, fiendish sharks, ever-observant of fish in trouble, to enter the battle zone and help themselves to huge chunks out of the tarpon's body. Even in such moments, while our fish is trying to escape ugly death, its unexpected movements are so terrific the angler may in-

expertly handle the tackle; the rod may be momentarily rested on the bow of the boat, and a downward plunge of the tarpon results in a broken rod.

Therefore, t h e silver-king is not always captured. But, when luck attends and the sport is skillfully conducted, the fish is fully exercised at the end of the line and, like the fisherman, becomes exhausted.

When reeled towards the boat, his belly upturned—the fish sign of surrender—glimpses are permitted of his bon-bon colored belly and beautiful figure. His powerful fins are relaxed as he is pulled alongside.



... “and so the unwilling reprobate is brought alongside” ... After having his “measure taken” the tarpon is released, unharmed: Weight 89 lbs. Length $5\frac{1}{4}$ feet.

The alert guide first inserts a "landing hook" very gently—so as not to draw blood or injure the dormant contestant. The next part of the ceremony is carried out when the warrior is hung on the weight-scales brought along for the purpose. After his "measure is taken" he is released from his cable-tow. Since he has no value he is permitted a final splash or two when he is returned to his former haunt; then rejoins his friends or family. There, we hope, he will breed more of his kind to entertain the devotees of our fraternity who will assemble here in the future.

We shall devote several pleasant evenings to contacting his piscatorial highness. Should you be so fortunate as to be his victor you shall have the privilege of retaining a choice tarpon's carcass for mounting. Thus a suitable crown will be provided for the august monarch.

All this and more awaits us!



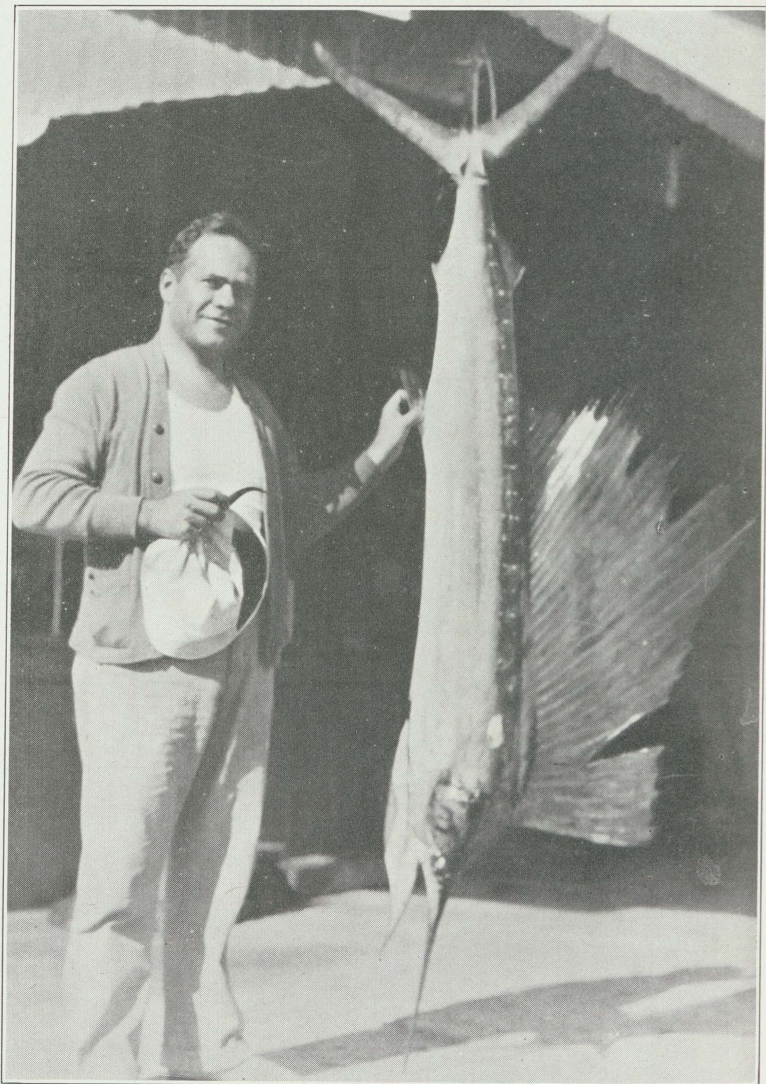
A SPLENDID CATCH—6 "SILVER KINGS"

Left: Sam Rosenberg

Rear: The author

Right: Gregory Lopez, guide

Caught at Pregnant Pass (25 mi. north of Cape Sable) during a night of moonlight trolling. Feather jigs were used as lures.



—Key West Adm.

OLD REFERENCES DESIGNATE IT "AGUJA VALDORA", a name almost as regal as the sprightly denizen itself. Sailfish belong to the aristocratic, ancient and honorable spear and swordfish family. Its symmetrical body is magnificent with a neat-looking smoothness.

While spending a Xmas Holiday vacation at Key West, Conrad Van Hyning, Director of Florida's State Board of Social Welfare, conquered this debonair sovereign.

SAILFISH



WORTHY of comparison with, and rivaling the silvering in spectacular battle feats—but entirely different in other respects—we now meet the Crown Prince and Princess, Mr. and Mrs. *Istiophorus Americanus*. (The Pacific species is called *Istiophorus Gregi*). Because of our intimate contact with them we call them sailfish. Old references, however, designate them *Aguja Valdora*, a name almost as beautiful as the creatures themselves. They belong to the aristocratic, ancient and honorable spearfish and swordfish family.

DESCRIPTION—In appearance the sailfish is handsome indeed, being dainty and elegant. Its perfectly formed body is elongate; its scales are so minute they are invisible, imparting to its magnificently streamlined shape a trim, neat-looking smoothness.

In coloration its coating is a dark, lustrous bronze or horizon blue-grey combination with lavender hues. A series of champagne or hazel-brown dotted marks or stripes adorn both sides from its back to the belly. Some have a tint of henna flash across them. This marine inhabitant is particularly attractive to the eye for these as well as the following additional reasons:

Nature for its own purposes fitted this particular species with several distinctive features. A special fixture, artistically and uniquely grown on the sailfish makes him most unusual. It is a royal purple or sapphire-blue, web-like dorsal (back) fin. This is extremely large; it is highest at or just behind its middle, extending along nearly all of the upper extremity, rising at the pleasure of the sailfish $1\frac{1}{2}$ to 2 feet; then it resembles a sail. From this ornamental and useful attachment the species derives its name. The sail enables the fish to glide along jauntily on its bosom and retain its classical, rythmical balance in the oceanic depths. When not in use the imposing wing folds neatly and smoothly into a deep, narrow groove or slit along the top of its back. So precisely does this fit its socket that the human hand may be passed over without the sense of touch discovering it. It is truly a perfection of nature's handiwork!

The caudal (tail) fin is one of the most perfectly formed and handsome in all fishdom. This tail is very sturdily con-

structed; its outer portion is in the shape of a crescent, giving it a dignified appearance. Its color is soot black. This rear end is capable of many uses. One of them is to enable the fish to poise itself gracefully on end, body upright and sticking two-thirds out of the sea. In that position it is a superb and imposing sight. Few persons have been quick enough to obtain photographs of sailfish during such brief poses; those who have are fortunate.

In addition to the characteristic sail and tail described, an unusual, distinctive physical appendage grows spine-like out of the upper jaw into a long, cylindrical, bony-like spear. It is a continuation of the head into a bill or snout. This cane-like fixture looks smooth from a distance but is actually as rough as sandpaper. At its base the snout is an inch or more in diameter. The length of the bill varies with the individual sailfishes, the average being $1\frac{1}{2}$ to 2 feet long. With this weapon the sailfish strikes its prey; and, assuming that it effectively injures, paralyzes or kills its object, in a few moments the sailfish returns to seize and devour the thing which it has violently struck.

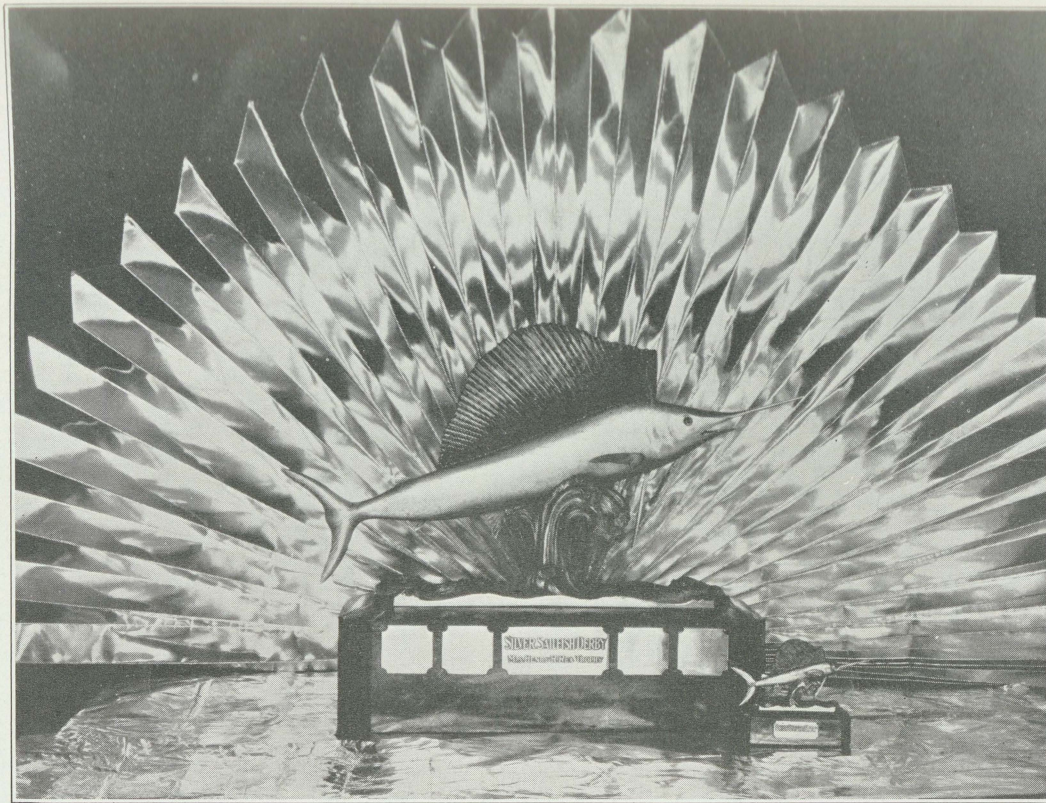
The head is hard and bony. Its lower jaw is a long, pointed, beak-looking affair as contrasted with the upper head which continues in the form of the bill or spear. Set in the head is a pair of gleaming, dark, almost black, imposing eyes which are appropriately large. The mouth has teeth, in which respect the sailfish differs from the swordfish.

Another unusual thing about the sailfish is a pair of scissiors—blade-like, jugular fins, approximately 12 inches long, placed underneath, behind the gill covers. Also, underneath the body and towards the rear, just before the tail adjoins, is another pelvic fin.

SIZE AND HABITAT—It behooves such a novel and showy prince of the underwater kingdom to live in luxurious comfort. Sailfish inhabit the warm, pleasant tropical waters of Florida, being partial to the indigo-blue serum of the Gulf Stream. There they exist on the plentiful supply of microscopic and larger marine life throughout the year. Off the keys and along the East Coast of Florida as far up as Miami, Fort Lauderdale, Delray and Palm Beach the Gulf Stream current is not far offshore. Large fleets of luxuriously built and equipped yachts are anchored at these places, available for charter to visiting anglers. Sailfish catches are made daily, evidencing the fact that they are captured by enthusiastic devotees to the sport during every month.

At West Palm Beach recently some fishing addicts organized a Sailfish Derby¹ which sponsors an angling contest held January 26 through February 15 annually.

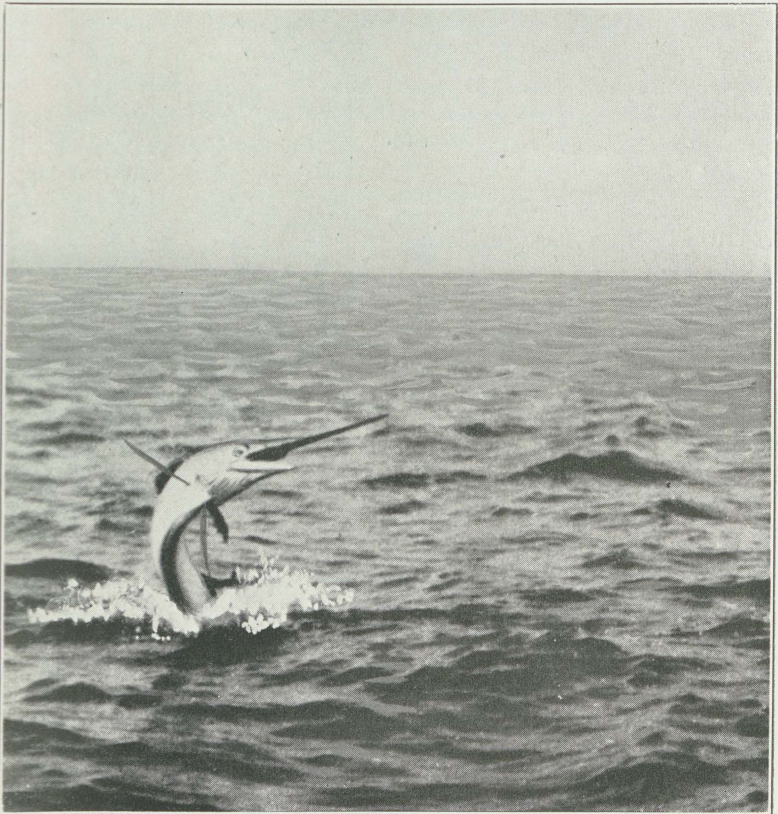
¹Besides the derby, the West Palm Beach Fishing Club sponsors winter and summer contests (November 1 to April 1, and April 1 to November 1). Handsome awards are presented to anglers catching the heaviest fish of each species.



\$1600 grand prize offered to contestants by officials of the West Palm Beach sailfish derby. The replica of sailfish is sterling silver, mounted on onyx base. It is awarded to the lucky angler catching the most noteworthy sailfish.

A west or northwest wind offshore at the lower Florida East Coast creates a choppy sea. This stirs up sediment and makes it necessary to postpone deep-sea angling a few days. At Palm Beach Inlet (see map-chart) anglers are rarely affected by this. The Gulf Stream at this point almost laps the shore, permitting fishing close in. A lea is created at the place by the offshore wind, and it makes the conditions favorable.

In 1935, more than 2500 anglers, many of them women, on 67 fishing-yachts (half of these privately owned) participated. No registration fee is required to enter the derby but all must follow prescribed rules and regulations. During the 3 weeks derby period 545 sails were caught—120 of them in a single day. Of these each sailfish longer than 8 feet entitled its victor to a gold button award. The longest specimen measured 8 feet, 7½ inches, and was ensnared on the last day of the contest. It won the grand prize—an onyx base with the angler's name engraved thereon, over which is a mounted sailfish design. The next two longest entries were 1/8 and 1/4 inch shorter.



—Capt. James Jorgensen

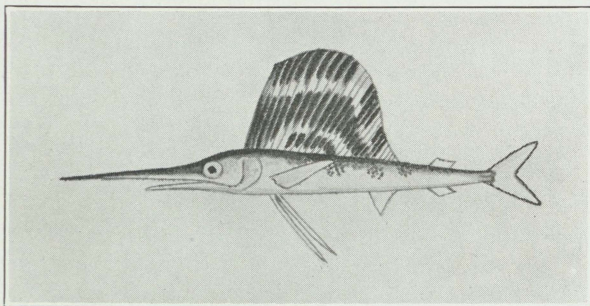
"It is the sailfish's misfortune to be a social distinction to be caught", wrote Theodore Pratt. "Every Florida visitor aspires to tackle this fascinating Gulf Stream fish-pillager, to see its long bill shot out from the sea sanctuary like an arrow."

Over 200 of these royal, sea aristocrats were caught on the charter-yacht *Snoozy*. Only the patriarchs of sailfishdom—trophy or “button” catches, and those for mounting—were retained. The remainder were carefully liberated (like 242 additional bronze-bodied sails caught on this cruiser by visitors to Palm Beach during the 1935-36 winter season). Credit for this genuine sportsmanship is due Captain James Jorgensen, of Riviera (a suburb of Palm Beach), one of the most successful and energetic big-game fishing guides on the East Coast.

An Atlantic sailfish record—106 pounds—was made off Miami Beach in 1929 by W. A. Bonnell. Larger ones elsewhere have been reported as long as 14 feet. The biggest specimens apparently are found along the coasts of Central and South America and especially off Panama. Judge Louis W. Myers was victorious in a skirmish with an 182-lb. sailfish, probably the largest taken with rod and reel—off Cape San Lucas, Mexico, February 8, 1936. A Pacific sailfish was caught which weighed 180 pounds, being 10 feet, 8 $\frac{1}{4}$ inches long—August 1, 1931, by William B. Grey at Perlas Islands, off the Pacific Gulf of Panama, on an expedition sponsored by George Vanderbilt. A prominent sportsman's magazine stated that it was weighed on recognized scales four hours after the catch and no doubt it lost a few pounds between the time it was removed from the water and weighed. Tackle used was an 8-oz. rod tip, 18 thread line on a 6/0 size reel. Battling time was less than one hour. The fish is exhibited in Palm Beach, Florida.

During the last couple of years many salt water gamefish records have been established, most of these being in Florida waters. On May 23, 1934, a 119 pound sailfish was caught near Key West by Ernest Hemingway, the novelist and writer, in conjunction with J. S. McGrath. It was 9 feet, 3 $\frac{1}{4}$ inches long, with a girth measurement of 2 feet, 11 inches. Strict interpretation of club regulations would disqualify for record purposes any fish which more than one angler participated in handling. The present work, however, intends to mention unusual catches, regardless.

Not many very small sailfish are reported caught. The times and places of their spawning cannot be learned. While bailing out a skiff at Dinner Key, Coconut Grove, near Miami, in May, 1936, John Eckert discovered the world's smallest known sailfish: a perfect specimen, 2 $\frac{1}{4}$ inches long. It was alive when



Drawn from Life-Specimen by R. F. Deckert for Pflueger Marine Museum, Miami, May 28, 1936.

WORLD'S SMALLEST KNOWN SAILFISH
(illustration is exact size)

Washed into a skiff and found alive at Dinner Key, Cocconut Grove, Fla. Mounted by Al Pflueger, taxidermist. Its weight was approximately 1/10th of an ounce.

found. Miamians, to whom it was shown, concluded that the tiny creature was swept into the boat by a wave crest. Jack C. Stein, of Atlanta, had just boated a 65 pounder off Miami Beach, January 18, 1934. A few moments later his angling companion felt a weight on the line. It proved to be the world's smallest sailfish taken on rod and reel—a two-pound specimen. The “miniature” and “grandfather” were both mounted by Al Pflueger, Miami taxidermist. Fred C. N. Parke, a taxidermist formerly active at Long Key, referred to a sailfish caught as small as 3 pounds. The compiler of this volume has taken one a few pounds heavier off Miami Beach for his mounted collection; it is built on the pattern of its larger parents.

The average sailfish taken in the Gulf Stream waters of South Florida is about 7 feet long and weighs between 35 and 50 pounds. Much larger specimens are sometimes caught there.

FEED AND FOOD—Being surface feeders primarily, as are most deeply cleft-tailed fishes, this genera preys on the ample small life (crustacea, shrimp, small fry and the like) inhabiting the Gulf Stream and reefs along the Florida straits. For human consumption, however, this refined harlequin is not of much importance, although a number of people relish a sailfish steak. Like the tarpon, this species' principal usefulness for human beings is his sportiness in action, outper-

forming even themselves in inimitable stunts for appreciative angler-audiences.

TACKLE—Because sailfish do not readily take the lure into their mouths they are very difficult to hook. But, once engaged they clear the water repeatedly in their hostile and frantic efforts to dislodge the hook.

A 6-ply bamboo tip weighing 6 ounces and about 62 inches long, with an 18 inch butt—the entire rod between 6½ and 7 feet long—is excellent. The outfit should be “balanced” with a good make of reel which holds 600 feet of 12 thread cuttyhunk linen line. Lightweight (.022 diameter) rustproof leader wire and 5/0 or 6/0 hook are preferred. These are as heavy as most experienced sailfish anglers like; in fact, a 9 thread line is frequently used, because it gives the fish a fair chance to fight for its life. Moreover, if the tension is too tight on the reel the lighter weight line will part company from itself, it is hoped, rather than make the rod tip suffer until it breaks under unusual strain.

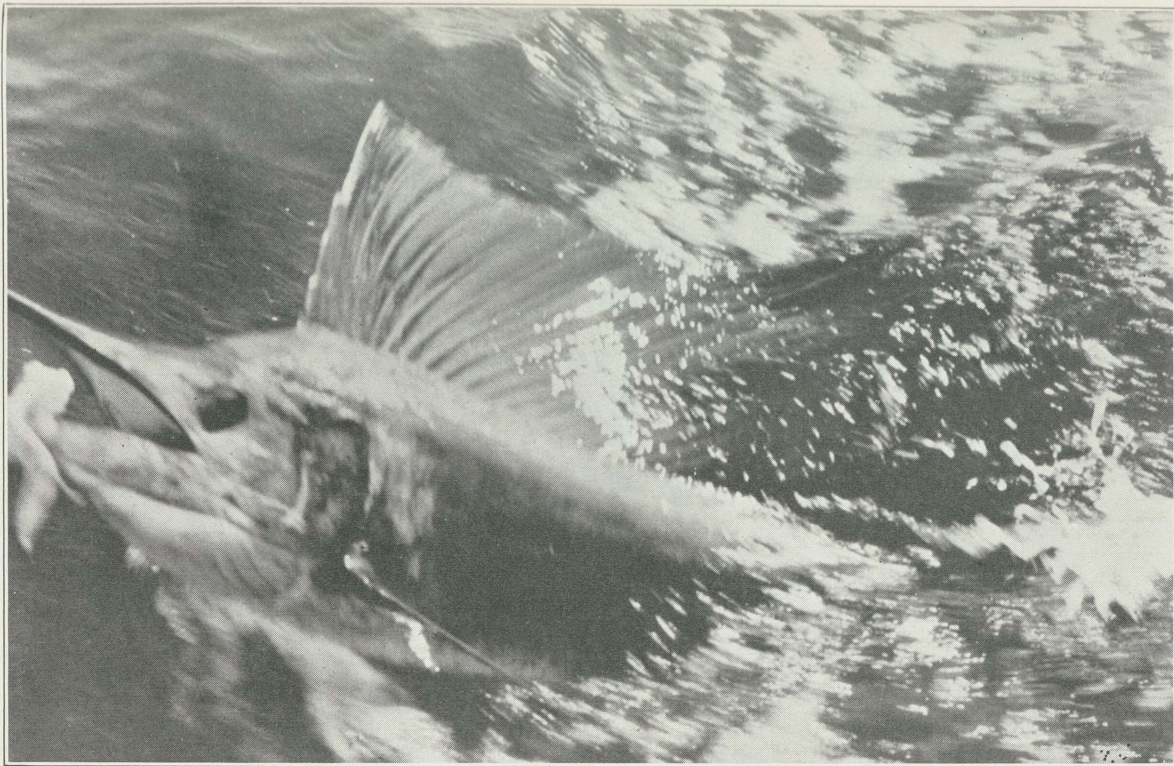
What is referred to as a teaser is used by many seekers of sailfish. This is a large, wooden plug, about 8 inches long and 1½ inches in diameter. One end is tapered nearly to a point; the other end is almost blunt with a small metal ring attachment so it can be tied to a line and trolled about 30 feet behind the moving boat. The plug is enameled white except the large end or head—this latter portion is red. This contraption attracts the fish so he will come to the surface.

Approximately 20 feet behind the teaser the bait comes into the fish's view. Usually teasers have no hooks, the purpose being merely to “bring up” and inveigle the sailfish to strike the bait with its bill. However, all kinds of fish actually do strike and cut this wooden plug with their teeth and leave imprints on it. When properly affixed the teaser is tossed about on the ocean's surface; it dives, sulks, hesitates, jumps in and



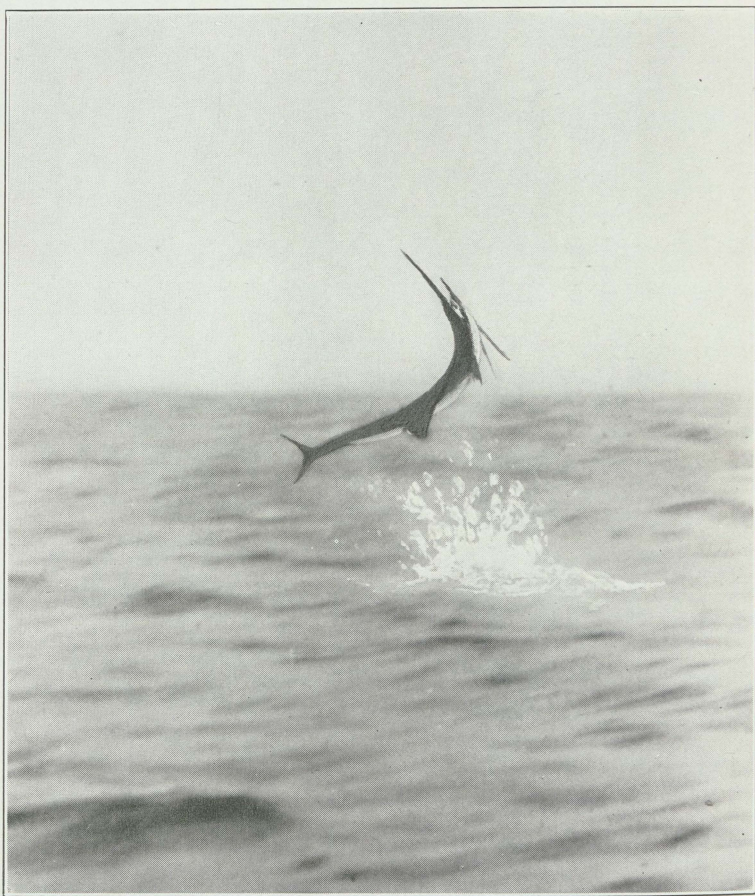
BALOA (BALLYHOO)

Before being used for bait the beak (a prolongation of the lower jaw, set with fine, pointed teeth) is broken off. Some reach a length of two or more feet. Ballyhoo about a foot long, hooked through its head, makes choicest bait for sailfish.



It is necessary to keep a sharp eye on the bait continuously . . . If the sailfish follows the lure and accepts your challenge his strike may be completed . . .

—Capt. James Jorgensen



—Capt. James Jorgensen

SAILFISH IN ACTION

He tail-skids, leaps loftily in air, exposes a trim, purplish-bronzed body with its great, spotted sailfin; shakes his snouted head with menacing effect . . . then with this wing folded makes another heavenly twist or two before plunging headforemost into his watery retreat.

out of wave crests and generally flops around. The disturbance causes big game fishes to come up and "sock" the offending thing which apparently is mistaken for a wounded fishlet.

Many guide-captains invariably put out the teaser. Some, on the contrary, frown upon its use; others absolutely forbid it. Individual guides have their own ideas and, following their instincts, use different methods. It is wise to observe the suggestion of the "skipper." Best results are had from such co-ordinated efforts, even though an experienced angler favors a different procedure. The guide's greatest desire is to get results. He wants it known around his locality that he is successful in his trade. If his theories are followed he will use his knowledge and judgment to best advantage and unloose his best professional tricks.

BAIT—Sailfish strike many kinds of lures. They have been known to "tap" a metal spoon; even a white rag has been "hit". The most likely bait is a round, slender, elongate, greenish-silvery colored, snake-like needlefish with an almost cylindrical body a couple of inches in diameter—10 to 12 inches long—called baloa or ballyhoo. When ballyhoo is not obtainable a strip 8 to 10 inches long, cut from the side of a bonito or mullet, trimmed to a 1/4-inch thickness, tapered at both ends is likewise excellent sailfish bait.

The bait, regardless of the kind used, is trolled at a speed of 5 to 6 miles per hour, up, down, across and zigzagging with, in, against and out of the waves and Gulf Stream, and on its edges over the reefs. Choppy seas not too rough for personal comfort, coupled with a light, northeast breeze make excellent conditions to try for a "sail". Various guides "find sail" by noting and acting according to the existing conditions. Sailfish are caught trolling during daytime only. All months of the year are considered good. Some believe the first several months of the year are best. Two or three days before the full moon in March is considered very favorable. Clear water (that is, not "trashy seas") ruffled by a breeze is preferred. Too much space would be required to explain here all the many things which cause guides to make decisions in deep sea fishing, especially for sailfish. And, as stated, since your boat captain is paid to guide you to the most likely places, although all do not agree on the finer points of the sport, most of them are successful in locating and raising a gamefish for you. They

are a conscientious, hard-working lot. Most guides refuse to "go out" unless they think there is a possibility of obtaining results.

GAME QUALITIES—Hopes and desires alone avail naught in this great sport which attracts presidents and people, women as well as men, in every walk of life. Effort and patience are required to locate and make sailfish strike. The captain or mate posts himself where he can observe the waters ahead for a long distance while the angler does his part by being continuously alert and keeping a sharp eye on the fastly trolled lure. More than one sailfish may sight the bait and follow



—Key West Adm.

These winter visitors to Key West were delighted by their brisk victory after battling three spear-headed sailfish.

A taxidermist elegantly preserved the remains of one, a lasting and suitable disposal of the game and attractive sea-knight.

it for several miles, but refuse to come within striking distance; instead, it aggravatingly idles or swims at the surface in the vicinity, proudly exposing its great, upraised sail. One skipper remarked that this trait reminds him of the "wimmin folks who like to display their tresses—but that's all". A sailfish may tap the bait faintly with its snout but not follow it up. Frequently no amount of effort on the angler's part is effective in inducing the sailfish to "pick it up" after the "tap", and the pelagic tantalizer completely disappears from the scene. The author has found that by reeling in the line very fast, then dropping it back some 50 feet or more, again reeling in as quickly as possible, a would-be victim can be aroused to engage the hook. This tactic should be performed only when agreeable to the guide, however; at all other times leave the bait out and keep your eyes glued on it, hoping for an exposed sail to appear. Long and unprofitable hours may be spent thus. Unless the angler is alert at the precise moment when the bait is struck and drops the line back instantly, then reels it in with the greatest possible speed, the opportunity to get a sailfish may be lost. The purpose of this—dropping the bait back on a freed line—is twofold:

(a) The bait sinks because of the loose line given out. The sailfish probably imagines he has stunned, perhaps killed the small fry; or assumes that the fishlet is lost, and in fright rushes frantically to escape the impending danger of a deep-sea dweller following to devour it.

(b) The sailfish's mouth is underneath its snout-end. The strike is made, as a rule, sideways, so the fish must turn around as it halts its dash and return to pick up its prey. This "tap and return" attack is characteristic only of the spearfishes, few other species adopting it.

Therefore, the angler is cautioned in advance to be ready to count 1-2-3-4-5-6-7-8-9-10, slowly, the moment the tap is felt; after which he must reel in line as though one's life depended on the speed with which it can be accomplished. If the sailfish follows the "escaping", wounded yearling (small-fish) the strike may be completed. In that event the hooked sailfish will itself flee with reckless abandon far out into the blue waters. It does not stop until a couple hundred feet of line have been peeled from the reel.

Before the angler can realize what has taken place the Gulf Stream resident is engaged in a series of marvelous gallops and capers a long distance away. Your initial comprehension of your angling duty comes to mind when you notice your line has melted from the reel and is still "paying out" in response to these tactics. At the outset you are amused and entertained by the repeated wild rushes which develop into alternate skips, dives and reappearances, as it dances on the surface like a Russian ballerina in rapid succession. Moreover, it demands that the fish be allowed plenty of line, and it is quite difficult to keep it taut (but not too taut) without risking bad results. The tension on the reel is adjusted and when the fish pulls against it the flight is checked to some extent.

Line is regained at spasmodic intervals only to be lost again while the sailfish continues his acrobatic feats at the far end. The fish realizes by now that he has attacked the wrong thing; his fury and performance increase in intensity. In spite of your efforts to turn and play him, he persists in these wild rushes and runs riot into the endless stretches of the churned-up water. With sail fully spread, its brilliance comparable only to the beauty of a peacock's tail, he skids along. Several times the speared head comes out of water followed by part or all of the sailfish's body squirming and leaping loftily in air. Thus exposed he shakes his bony head much like a tarpon does, with menacing effect, bending the rod. Then he folds his attractive wing, makes another heavenly twist or two, dives and is swallowed up by the ocean. All this he does in his whimsical and nervous efforts to get rid of the tormenting hook which checks his free movements.

Your whippy rod-tip quivers in its socket. It bends nearly double! The reel sings out lustily with painful heat! That a fish causes you to fight so hard, without your being able to control its movements, gives you a degraded feeling. You put more energy into the battle, without immediate results. Fearing to pump the foolhearted fellow too strongly lest you may break the rod or the line, it is not unlikely that you may suffer nausea imagining that this strenuous effort will work a hole in his jaw. An inch or two of slack line enables it to become free and gone forever! It is serious! Your face no longer carries the smile of contentment. Perspiration forms on your brow. "Is victory to be denied me?" you wonder.

Although at the outset you failed miserably to interrupt the graceful flight, after the first half-hour the fortune of battle may favor you. Renewed hope enters your side.

Probably in less than an hour the glistening gladiator is finally brought to a stop. It turns on its side. You reel and it is brought alongside. The skipper-captain smiles as the sailfish makes a final, savage lunge. The sail of the fish is erected, making the work of holding it more difficult because it is not desired to injure the fragile webbed sail. It is liberated immediately and a pennant put out to signify your sportsmanship. But if it is your first sailfish you may desire to have it mounted. In such event the alert captain takes hold of the bill or snout and pulls the tired sea-dweller aboard with an expert yank; its form is laid before you. You gaze with satisfaction upon it and comprehend its streamlined body. Then you understand why this fish is capable of putting up such a glorious and



FREEING THE SAILFISH

Thoroughbred sportsmen and sportswomen request that the sailfish be released, unharmed, after the "skipper-captain" has held its snout and removed the hook. A white pennant is then hoisted from the yacht's mast to indicate that a "sail" has been liberated.

strenuous fight. Beautifully proportioned! Built-in power gives it energy and speed. It is one of the most deserving of the gamefishes.

You will not hesitate now to admit, even enthusiastically declare that the sailfish is a distinguished citizen of the deep. This being your initial capture the carcass is given in charge (on returning to shore) to a taxidermist. The fish-mortician elegantly preserves the remains. Thereafter Mr. Sailfish adorns the trophy-room in your home or club, or is exhibited in your office—and your vanity is pleased. A lasting and suitable disposal of so game and attractive a sea knight. No greater honor hath any fish!

The question is often asked, which does the experienced angler prefer—tarpon or sailfish? After you tackle both species you may care to answer. These two gamefishes have each earned well-deserved reputations on the firing line. When you are able to speak with authority you will, perhaps, place each in a class by itself. You will also agree that a sailfish is nearer to grace, itself, than any other thing living in the ocean.

MARLIN



URING the spring of 1934 Captain A—— C—— spent two months around Bimini waters getting first-hand information about the big gamefishes there. On his return he told the author:

"They bent our rods like arrows' bows. We used up all tackle and sent to Miami for more. No equipment obtainable in South Florida proved heavy enough. These fool fish showed not the least sign of tiring after hours of circling, racing, jumping and deep sounding. We struggled, tussled, and held on, grimly fighting them with all our might, but no amount of effort was even slightly effective. They would vault in the air, expose a great, plump body a dozen feet long, twist backwards and forwards at the end of the line like bucking bronchos. When they dropped back into the ocean a ton of seawater went skyward. They took off more line in the initial run than we thought we had aboard. To try and check these demons was like having a physical workout in destroying a mountain of granite. Long before the encounter got well under way we felt as though we had spent a month wrestling with a menagerie full of wild animals. There just ought not to be any such fish."

Dr. Charles F. Holder refers to an angler whose veins stood out like cords while he bathed in perspiration which rained down upon him and sobbed:

"Zee man who invented zis fishin' he ought to be in zee jailhouse . . . Come heere . . . help me! Help me; if you don't take heem off me I trow away zee rod and reel to zis debbil . . .

"For hours I take heem, zis fish . . . He take mee, he take mee skin, mee blood, next he takes meeself . . . Is dis fishin' or is it hadees?" . . .

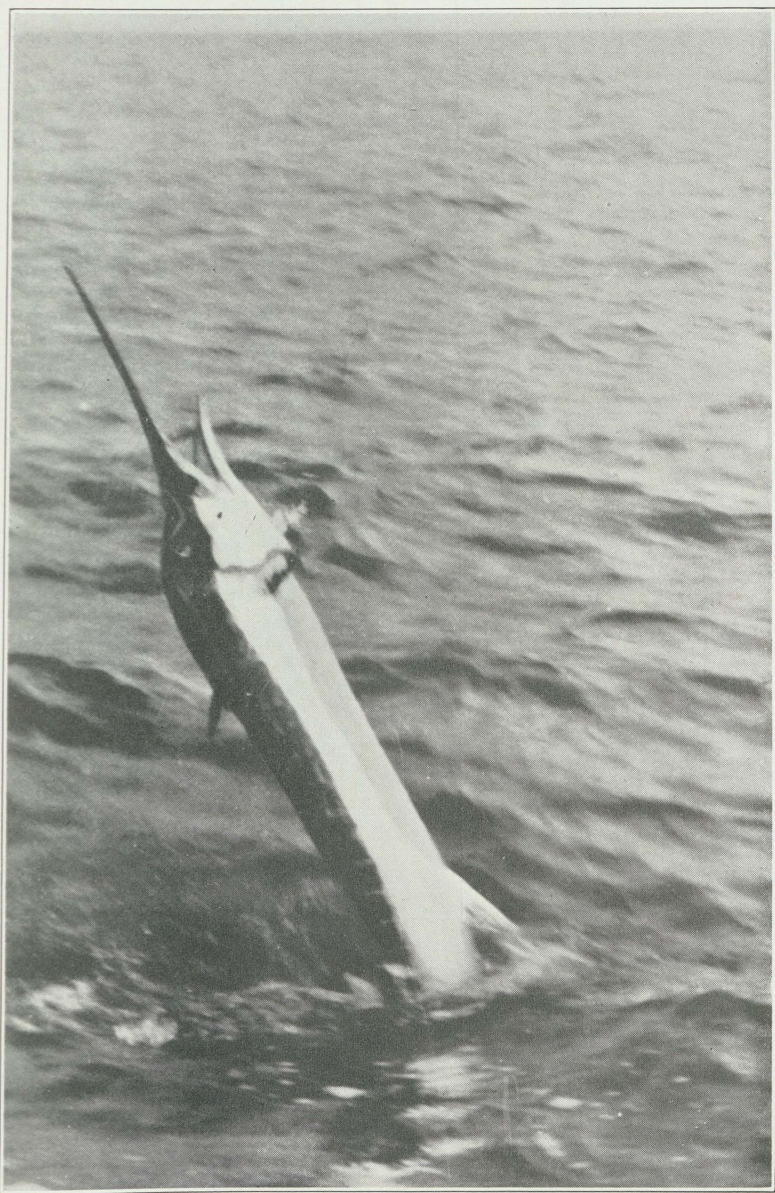
Poor fellow! No doubt a gigantic marlin was making his life miserable. *Aquja de costa!* The title "marlin" is too simple a designation for this tremendous, powerful marine-warrior.

Deep-sea anglers have just recently learned how to contact and fight this formidable adversary whose wandering habits take him into many of the world's waters. In spite of their heaviness they are the perfection of agility, spryness and coordination of physical control. Their endurance is nothing short of remarkable. Those who have not attempted to handle this fish on rod and reel will not be able to comprehend from mere word pictures.

MARLIN WORLD RECORDS
(Caught with rod and reel)

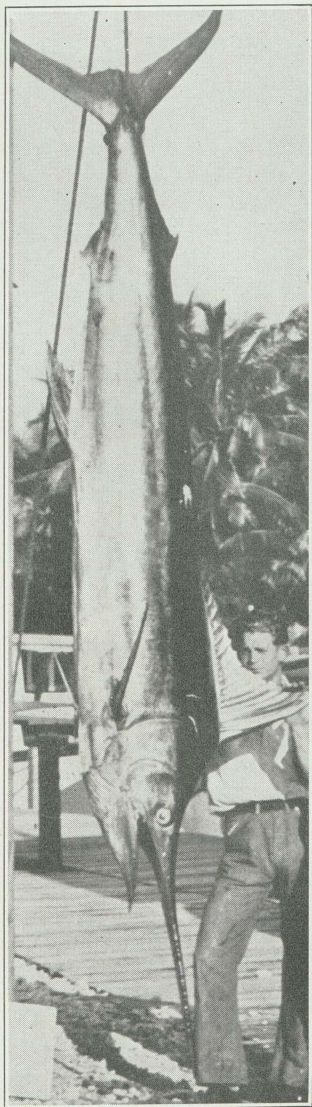
KIND	CAUGHT	WEIGHT lbs.	LENGTH ft. in.	ANGLER	PLACE off
Striped	5/16/30	1040	14 2	Zane Grey	Vairoa, Tahiti
Black	2/25/26	967	12 8	Capt. L. D. Mitchell	Bay Islands, N. Z.
Black	1932	823		Mrs. Eastman Guild	Cape Brett, N. Z.
Striped	1931	692		Alphone Hamann	Balboa, Panama
Silver	3/ ?/30	618		Zane Grey	Tahiti
Striped	1934	402		Mrs. C. W. Carson	Catalina, Calif.
—FLORIDA AND BIMINI RECORDS—					
Blue	6/18/35	636	12 1	Thos. D. Shevlin	Bimini, W. I.
Blue	7/ ?/35	326		Mrs. Michael Lerner	Bimini, W. I.
Blue	7/ 7/35	247		R. Stoddard, Jr.	Miami Beach
White	3/ ?/36	152		Mrs. M. B. Stevens	Bimini, W. I.

Note: This data from published authorities such as Field & Stream and other sources, April, 1936.



—Capt. James Jorgensen

.... Such great strength is lodged in the wide-spanned, arch-shaped tail that it is enabled to fight long and deep. Marlin repeatedly force the bulky body upright, out of water . . . To try to check it when in flight feels as though a physical workout is being had in destroying a mountain of granite . . .



MARLIN

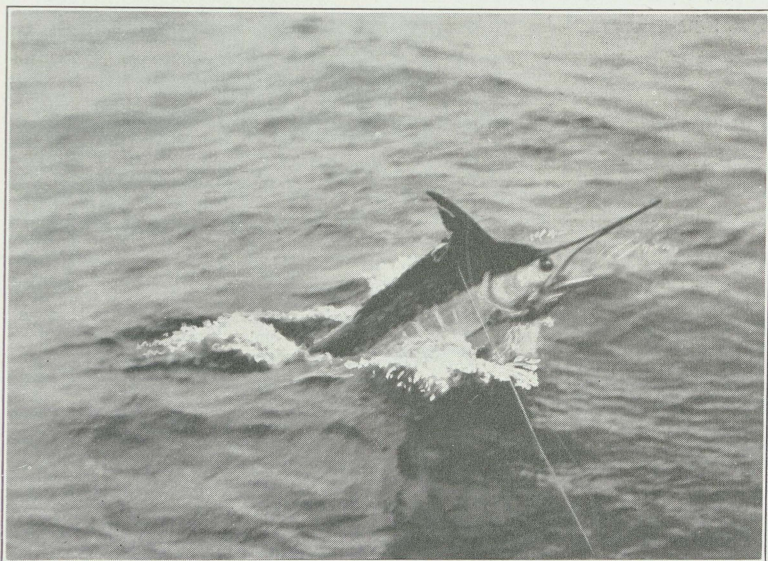
Nature stripped this mogul (marlin) for action! Its bronzed skin-covering fits tightly upon the long, sinewy, stockily-built body, giving it the appearance of an ancient, massive gladiator. Fierce eyes of enormous diameter add to its formidable aspects.

DESCRIPTION—Marlin hides are either blue, striped, silver or white. In their native habitat some radiate a handsome tint of purple, the bronzed covering or skin fitting tightly and smoothly on the long, stockily built, sinewy body. But like all monarchs, off their thrones they fade into a dull, slatelike shade. They vary in size and other characteristics; some have white, others pink flesh. The differences are probably due to the varied food conditions encountered, depths and waters traveled, individual ages of each fish and many other influences.

The head of the marlin is enormous. A bony or horny material forms its bill or snout, a much heavier and stronger one than that of the sailfish. Where it is an outgrowth of the upper jaw, or a continuation of the head, this fixture is a couple of inches thick. It tapers to $\frac{1}{2}$ or $\frac{1}{4}$ inch at the far end—two or more feet forward of the body. This sword is reputed capable of piercing the tough hide of the marlin's enemy—the shark. Imagine this spine-like dagger thrust at you with the unbelievable force this oceanic inhabitant is capable of; probably, if its aim proved true, there might be one more widow created suddenly. Back of the spear, over the gill covers in the head is a pair of fierce looking, brilliant eyes. Marlin are distinct from their spearfish and sailfish kinsmen

in several respects. Although they are equipped with a pair of scissors-like jugular fins like sailfish, instead of an elaborate sail it has a relatively small, gently rising dorsal fin mounted back of the head on its top; this extends upwards about a foot high and then tapers down to a couple of inches. When not in use it sinks into a narrow recess or groove in the fish's back, fitting the slit perfectly. It is as though nature herself, striped this mogul for action!

A tremendous degree of strength is lodged in the grandly built, widely cleft tail which is rounded inside. It is used as an instrument of protection and defense as well as offense. A lash with this weapon alone would render senseless, or knock a human being overboard. The marlin uses its tail to force his bulky body upright, it clears the water by several feet when emotionally upset or escaping from the 12 and 15-foot-long cannibalistic sharks inhabiting the same waters. Then, especially when exposed to view at the end of a fishing line, the marlin resembles a monster thing, twirling and tumbling



Copyright—Lansdell Anderson

Courtesy—*Field & Stream*

AGUJA DE COSTA! The title "marlin" is too simple a designation for this gigantic marine warrior. It takes the shape and qualities of its pelagic kindred, but instead of an elaborate sailfin, the dorsal fixture is proportionately small.

as its body gyrates and glistens against the reflection of the tropical sun.

HABITAT AND RECORD SIZES—Various species of marlin have been caught with rod and reel in widely separated places. These gigantic combatants are pelagic wanderers. They are found along many coasts during spring and summer.

Small marlin, weighing up to approximately 250 pounds, are occasionally taken off the lower coast of Florida. Anglers who crave the bigger tackle-wreckers hunt for them on the eastern edge of the Gulf Stream along the island of Bimini in British waters of the West Indies—a brief five or six-hour voyage by boat from Palm Beach or Miami.

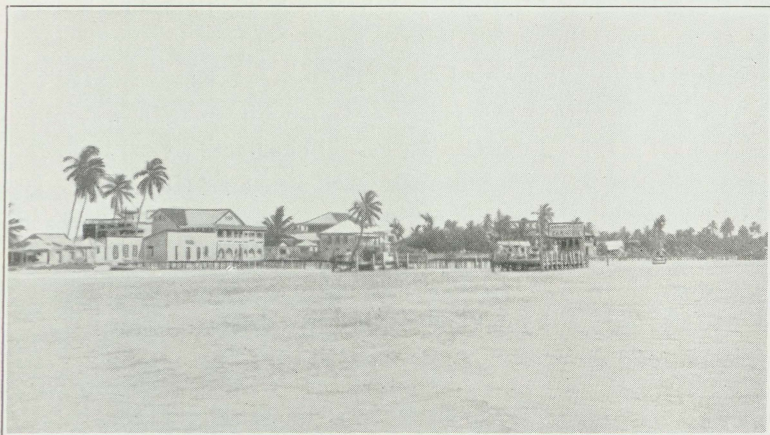
The Florida and Bimini records have been taken into account in the past year or two. During 1935 several splendid catches were made.

On June 10, 1935, while fishing on Captain James Jorgensen's charter-yacht *Snoozy* about a half-mile south of Palm Beach Inlet Mr. C. H. Warwick, Sr., of West Palm Beach, "tied into" one of these enormous marine creatures. They were cruising but two miles offshore—the Gulf Stream almost laps the mainland in this vicinity. The massive hooked-fish was on the jump almost continuously. It splashed water all around and high above, like breaking surf-swells, and alternately sounded several times with nearly all the 450 yards of 18-thread line stripped from the 6/0-size reel. A 15-inch strip of bonito bait was the lure. When the blue or black marlin was boated, the *Snoozy* was fully 2 miles north of the Inlet where the strike was made. The official length was 9-ft. 3-in., and weight 218 pounds. John S. Taylor, taxidermist, mounted this specimen.

Up to 1935 the largest marlin reported caught in Atlantic waters was by two anglers—Mrs. Ann More, assisted by L. R. Wasey, both of New York. She was fishing with a 16-ounce rod tip, 24-thread line on a 9/0 reel, 45 miles offshore from Miami (no doubt Bimini). Her fish measured over 12 feet long, and made 14 grand leaps during the contest, which lasted 6-hours. Twenty-four hours later it weighed 502 pounds.

Bimini¹ is rapidly becoming the mecca for enthusiastic anglers who crave battle with the mightiest of all big gamefishes.

While the author fished there during the summer of 1935 a 636 pound blue marlin, 12-ft. 1-inch long, was caught by 21-year old Thomas Shevlin of New York. Its girth was 58-in. Perhaps, this is the largest Atlantic specimen taken on rod and reel and brought in unmutilated by sharks. Shevlin was aboard Captain Bill Fagan's "*Florida Cracker*", using a 24-oz. hickory rod-tip, a 14/0 reel loaded with 2100 feet of 54-



EAST OF THE GULF STREAM IS BIMINI ISLE

The most westwardly dual strip of low-lying coral formation atop the great Bahama Bank. Offshore, in the Gulf Stream's 2500 foot-deep Atlantic Ocean channel lurk some of the world's largest, most eagerly sought gamefishes—marlin, giant tuna, mako-shark and others.

¹BIMINI—The island is in two parts, North Bimini and South Bimini. Located about 50 miles off Miami Beach, it is perhaps, the plateau of a narrow, submarine mountain of fossil coral reef formed ages ago, before man's history began. Originally the "mountain" was submerged, 150 to 200 feet of water then being over its top. Upon this the corals, shells and other forms of marine life gathered, alternating with layers of volcanic ash, lava, etc., like other West Indian islands. Huge tidal waves, gales and subterranean forces pulverized the bunched-up matter and solidified it. After that, growth was rapid. Eventually a few feet became exposed above the water's surface. Today this exposed area totals about a mile. It is inhabited almost entirely by Negroes.

The abruptly-sloped, steep west-edge of the island looks towards Florida, from which the Gulf Stream separates it. A great, 2500-foot deep chasm is utilized by this oceanic current forcing itself through the gorge. The oceanic scenery along its wave-washed shore, bordering the precipitous edge, is grandeur itself. Like other Bahamas and Bermuda waters it is crystal clear in depths of twenty or more feet, enabling marine life to be observed in all its fantastic glory.

Up to the recent repeal of "prohibition" in the United States Bimini harbor was picturesque with anchored "supply ships". Rum-runners nightly carried to Florida and other mainland coasts a large part of the great supply of contraband liquids which served to quench the thirst of people in the States. Since repeal the "supply boats" of Bimini are gone. With them went the means of a livelihood of many a resident of the little island. The inhabitants have taken to fishing. Coincident with reports of giant tuna, marlin and other gigantic species being sighted in the vicinity noted anglers from distant points have recently begun to assemble at Bimini to capture some of these record-size fishes. Many have already been successful. Bimini, therefore, is destined to become famous for deep-sea angling in the years to come.

thread cuttyhunk linen line and it required $2\frac{1}{2}$ hours of steady, unrelenting effort to take his prize catch!

About three weeks after Shevlin's fish was caught Russell Stoddard, Jr., fishing off Miami Beach on Captain George M. Stephens' charter cruiser "*Baby Skylark*", had the good fortune to tie into a 247-lb. blue marlin (July 7, 1935) and boated it after a grueling fight.

A 152-lb., $8\frac{1}{2}$ -ft. white marlin (*makaira albida*) was taken by C. C. Lincoln off Miami Beach March 22, 1935, but because of the manner in which it was caught, there is doubt as to whether it can be included as a record.¹

The American *light* tackle record on white marlin was made in April, 1934, by John Cass, a Miami charter boat captain. He used a 6/0 reel, 12-thread cuttyhunk linen line and 6-oz. rod tip. The grind aboard the cabin cruiser "*Boy-Mac*", navigated by his brother (Captain Archie Cass) continued $2\frac{3}{4}$ hours. The white marlin weighed $141\frac{3}{4}$ lbs.

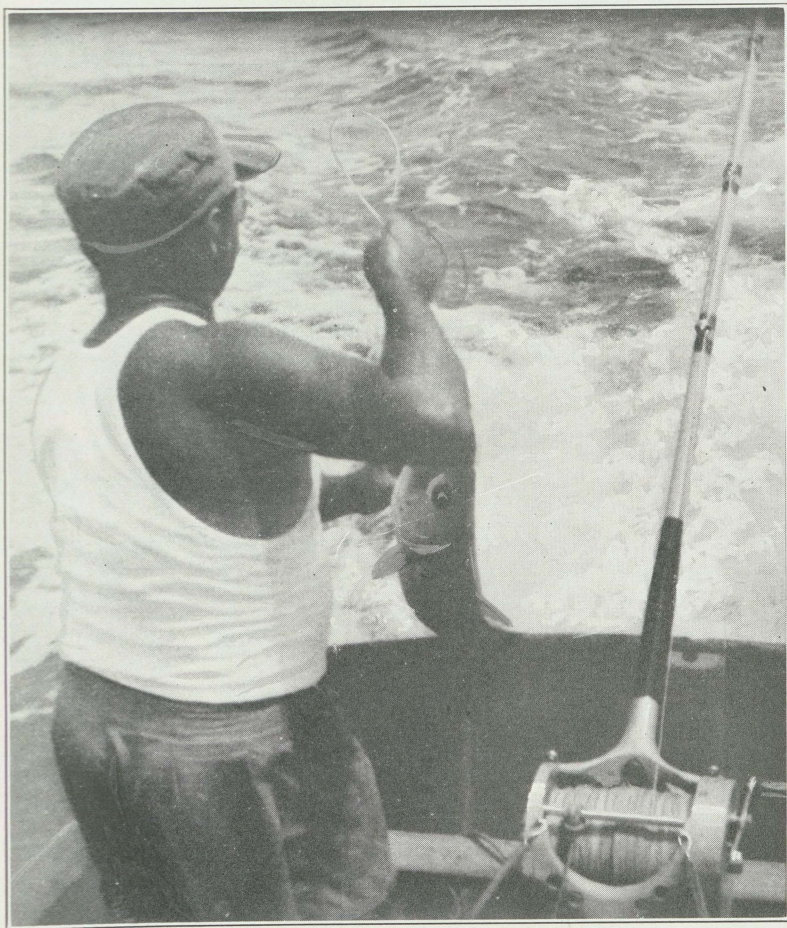
At the time of the author's visit to the shark-infested waters off Bimini in June, 1935, several fishing yachts were busily engaged in the attempt to secure record fish. Day after day anglers—men and women—baked their scarcely clad bodies under the terrific tropical heat while skipper-guides strained their eyes every moment during the daily, 10-hour steady trolling in search of evidence (an exposed fin) of a big marlin or tuna.

In the vicinity was Tommy Shevlin, previously mentioned; Ernest Hemingway, novelist from Key West, attended by guide captains Archie Cass and Tommy Gifford—two of the best in the "profession"—from Miami, and two additional guides, one from Cuba. Mrs. Michael Lerner came later; she captured a 326 pound blue marlin.

Let us leave our boat anchored at Bimini (Ed's dock) and join a party of enthusiastic devotees leaving on another cruiser at daybreak for this sport. Tackle, so tremendous that it has to be especially built for this fishing, is in evidence—24-oz. (minimum) and much heavier rod-tips of hickory, with high riding guides and "pully tops"; butts ingeniously mounted with im-

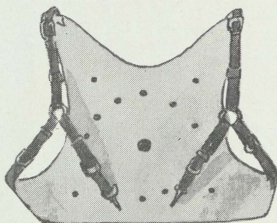
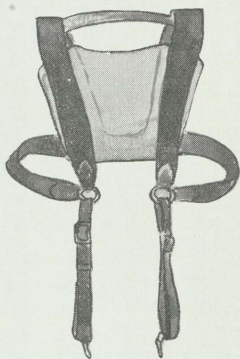
¹A 152-lb. white marlin caught off Bimini by Mrs. Marion B. Stevens, on March 14, 1936 may be accepted as the white marlin record.

mense reels ranging in size from 9/0 to 20/0—these reels probably cost as much as \$750 each; lines from 36 to 72 threads, as long as 4500 feet, coiled tightly on the immense reel-contraptions. To manipulate this tackle the angler necessarily straps himself in "harness" (leather vest) from which two cables are suspended to support the outfit.

*Field & Stream*

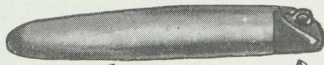
TACKLE FOR BIMINI WATERS

The 24-oz. hictory rod-tip is mounted in a divided butt which holds the immense, 14/0-size reel. From 2400 to 3000 feet of 54-thread line is recommended. A bonito, mackerel, bonefish or barracuda of about 2-lbs. is sacrificed as bait for a worthy opponent.



HARNESS

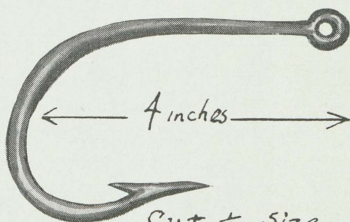
11½ inch TEASER



Aluminum Body

Red Head

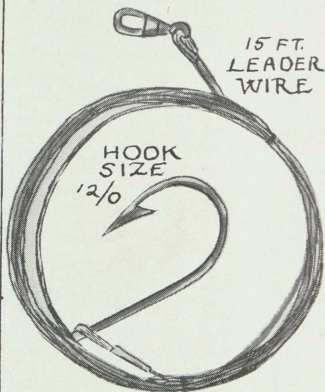
Marlin + Swordfish Hook



Cut ½ Size

Designed by the late Mr. O.C. Grinnell, an authority on all deep sea angling and the first man to land a Broadbill Swordfish on rod and reel on the Atlantic Coast.

TOGGLE SWIVEL



Marlin Fishing Tackle.

The line is run through the rod guides and then doubled back ten or fifteen feet; its end is connected by a toggle or "horse" swivel to a 15 foot long, heavy leader wire. Following is several feet of flexible cable wire with another large swivel, and at the end of this dangles a 12/0 or 14/0 steel hook, heavy in the bend.

A whole one or two pound bonito, mackerel, bonefish or barracuda—each 15 to 20 inches long—is to be sacrificed as bait. Securing and arranging bait requires skill and experience to make it "just right".

The fishing boats are equipped with two out-riggers, one on each side of the craft. Lines are rigged up, suspended 15 feet in air, and about the same distance offside, in such manner that a tap jerks the line loose causing it to "run out" or drop back and sink the bait when trolling. The long, bamboo poles (outriggers) hold the lines by means of clothes-pins and drag the baits over the ocean's surface, through the waves.

Probably, from this meagre description of tackle, bait and equipment it is realized that we are going up against a powerful sea-artilleryman. The chances are even that in a conflict such as we expect, there will be casualties to the outfit. Extra lines, hooks, wire-leader, swivels and sundry other pieces, besides a spare reel and rod or two are on hand for emergency.

Two lines are "out." Yours may be the good fortune to wait but a few hours before a fin is sighted in the "Stream" by the lookout on the specially constructed platform which extends out above the forward end of the boat (also used for harpooning purposes). The craft is moved in the direction indicated by the lookout. If the bait is tapped—as we hopefully pray—the line is jerked free of the clothespin and runs off the free-spool. (Unless the line is free, to run out as described, the reel will be burned up during the next several minutes). The fish follows the bait! Because a marlin's mouth is comparatively soft it is difficult to snag it.

Whereas the sailfish usually waits from ten to twenty seconds after the "tap" before picking up the lure, a marlin pounces upon its prey almost immediately after disabling it with its snout.

You have hooked him! He's off! Several hundred or a thousand feet of precious line may vanish with the first rush! For what seems an endless period the line continues to "pay

out'' behind the fast fleeing marauder. Both fish and line disappear on the horizon. Your entire strength is put into the contest to keep from losing the expensive tackle. In one such case where the line was tied to the reel's axle it snapped just at that point. The wonder is it did not pull the fisherman overboard; had this happened barracuda and sharks would have waited upon him without delay.

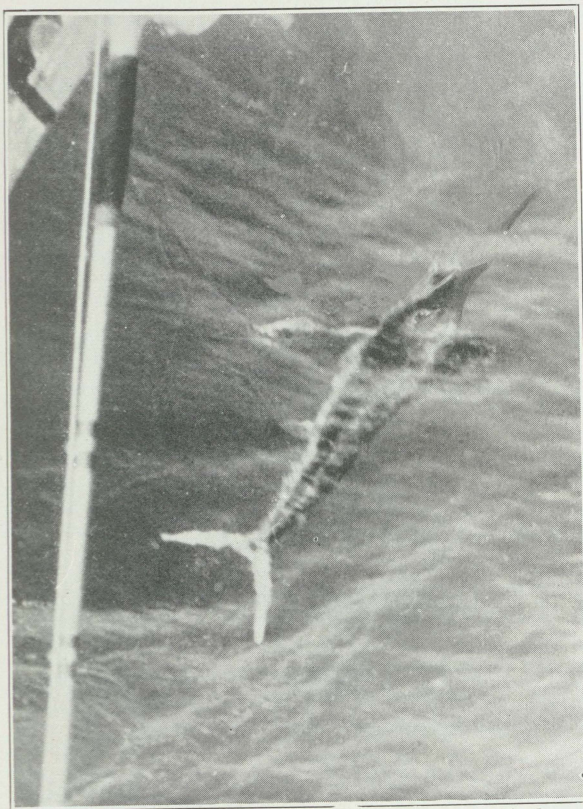
All your life you have heard of sea demons! Now one is engaging you! Animated with a spirit of adventurous endurance and mischief the marlin's hardihood compares favorably with the fiercest animal warriors. The sea-goliath's methods are exclusively his own. When he makes one of his spectacular leaps you are justified in believing that he never intends to stop. When he sulks below it is for such a long period you wonder if he has become affixed to the bottom; if you crave intense action you get it in a triple measure each minute. The minutes lengthen into hours. The hours continue indefinitely.

Few of these huge specimens hooked remain intact. Schools of ferocious, half-starved, 12 and 15 foot long prowling sharks come upon the scene. There is mounting panic in the water as well as aboard! Chunks bigger than your head are torn from the body of the marlin by these everpresent, sneaking, cannibalistic marine beasts. Woe unto any fish which, handicapped at the end of an angler's line, comes within smelling distance of the many rows of sawlike teeth of these tough-hide fiends! When brought to dock, diminished terribly in size, perhaps little more than half of the desired fish is left to be weighed.¹

Notwithstanding this almost certain tragic occurrence, when a marlin or tuna is taken the pent-up emotions of the angler and everyone else aboardship are loosed. Adorning the outriggers appears suddenly a pair of bathing trunks, a bedsheet or anything else which is convenient (in lieu of the usual marlin or tuna flag). This sight alone is worth the "price of admission."

Willing black hands, anxious for a gratuity, awaiting ashore on Eddie's dock at Bimini to take the fish's measure,

¹See illustration on page 196.



*The hooked
argus-eyed mar-
lin is brought
alongside . . .*

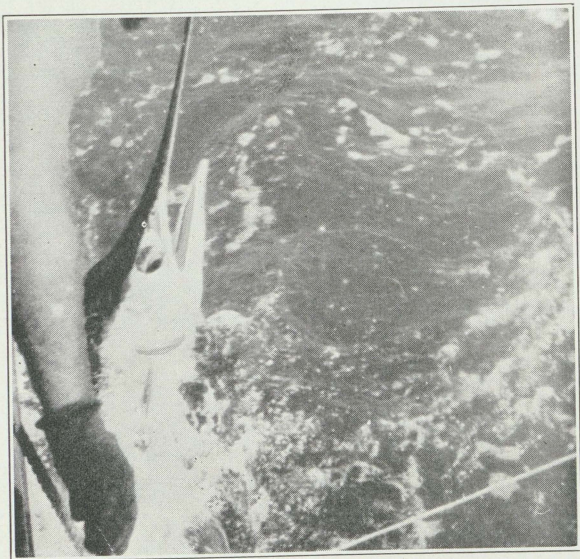
Photo—Lansdell Anderson
Courtesy—Field & Stream

A FISH GENERAL DIES IN BATTLE!

*His piscatorial
lordship is al-
lowed a final
splash or two. . .*

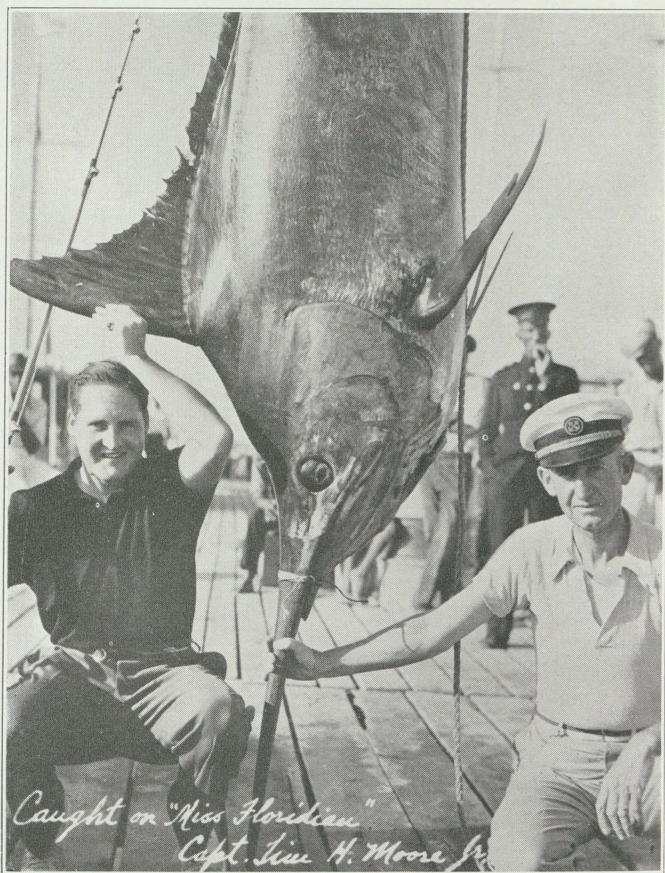
In his honor
the ship's colors
are lowered half
staff up! The
skipper - captain
rattles off an ap-
propriate obitu-
ary for the de-
ceased battler
accompanied by
choice remarks
from me.

"An object in
possession seldom
retains the same
charm that it
had in pursuit".



comment on the catch. The portion of the fish remaining is hoisted on a scale, and an informal committee (consisting of fishermen from the other boats) is appointed and, if most of the fish remains, the weight is duly certified.

Keep an eye on Bimini, the big game fisherman's isle of enchantment, which is destined to make angling history.



600-LB. BLUE MARLIN

(World's record for length and size-strength line)

Caught off Bimini Island March 26, 1936, by Girard Smith of Long Island, N. Y., a Yale University law student, fishing with Captain Tim Moore, of Miami Beach, on the cruiser *Miss Floridian*.

Tackle: "Hardy" split-bamboo rod with 26-oz. tip; No. 12/0 Edw. vom Hofe reel; 1500 feet No. 39 Ashaway linen line; 2-lb. bonefish as bait.

Smith's marlin was 13-ft., 9½-in. long (almost 1½ feet longer than Shevlin's record-weight fish of this species taken nine months previously in Gulf Stream waters off Bimini Island; and the line-threads were about ½ that used by Shevlin).

TUNA



THE Phonecians were acquainted with the Tuna. Prominent Romans relished salted tuna as a favorite dish. Californians refer to it as the "great albacore". In Hawaii it is called "ahi", meaning "fire" because of burnt fingers trying to hold it. In some localities it is referred to as a "horse mackerel". Scientists designate it "*thunnus thynnus*". Florida and Bimini fishermen know it simply as the "tuna"—the oceanic mackerel-like fish of the family "thunnidae."

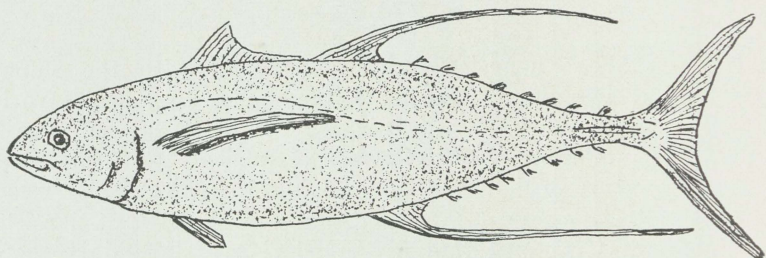
SIZE—Yearlings (about ten pounds) are caught on the Gulf Stream's edge off the southern coast of Florida. Farther out, in the deep stretches, yellow-fin tuna up to two hundred pounds may be found. A full grown adult, six or seven feet long, may weigh approximately five hundred pounds. Tuna have been known to grow to more than ten feet long and over fifteen hundred pounds in weight. One approximately 2,000 pounds has been reported taken by American commercial fishermen.

Being cosmopolitan, this largest of the great mackerel family roams the seas, in schools. The big ones lead the procession, remaining deep and rarely coming to the surface, consequently they are not often observed.

RECORDS—The youthful president of the Beach Haven Tuna Club, big-game sport-fisherman and writer, Francis H. Lowe, of Woodmere, Long Island, is credited with a 705 pound blue-fin tuna. His catch was made off New York harbor in 1933. Another rod and reel record, 780 pounds, was made by Edward Schaffer in Nova Scotia. On September 11, 1933, L. Mitchell-Henry caught a blue fin tuna forty miles off Whitby, England, which tipped the scales at 851 pounds—the world's rod and reel record for this species. This sportsman is also credited with a 1500 pound tuna, harpooned on the South African coast.

The southern waters record is a 542 pound, blue-fin tuna caught with rod and reel in June, 1935, by S. Kip Farrington, Jr. He was fishing on guide-captain Tommy Gifford's cruiser *Lady Grace* off Bimini Island, about the time of the author's visit there.

The Allison tuna (*neothunnus allison*) has also enabled some notable records to be made. One weighing 170 pounds was caught in February, 1936, off Miami Beach by Dan Stebins,



ALLISON TUNA
(1/10 average size)

and is the record for this species in American Waters. Previously, the American waters record was a 132 pound specimen taken off Long Key, Florida, in 1934, by Thomas Snyder. The woman's record was caught by guide-captain O. L. Shubert's wife, while fishing from his yacht, *Serenade*, off Miami Beach, July 1, 1935. Her fish weighed 123½ pounds.

COLORATION—The bodies of these fish are brilliant in water. They are dark steel-blue above. Grey and green oval shaped spots and longitudinal bands of several highly iridescent colors, primarily pinkish and lavender tints, appear on the back. The cheeks are a silvery blue, with sides and lower parts greyish silver. The fins are harmoniously colored dark blue, almost black, with a deep orange trim. The finlets are yellow, margined with contrasting black. The anal and ventral fins are grey or silver outside but almost blue-black inside.

BAIT—Tuna feed on bottom fishes. Mackerel make excellent bait. In California the flying fish is preferred; it is rigged up and made to skim over the surface by means of especially designed kites on outriggers. Extremely large feather jigs, too, prove successful as lures.

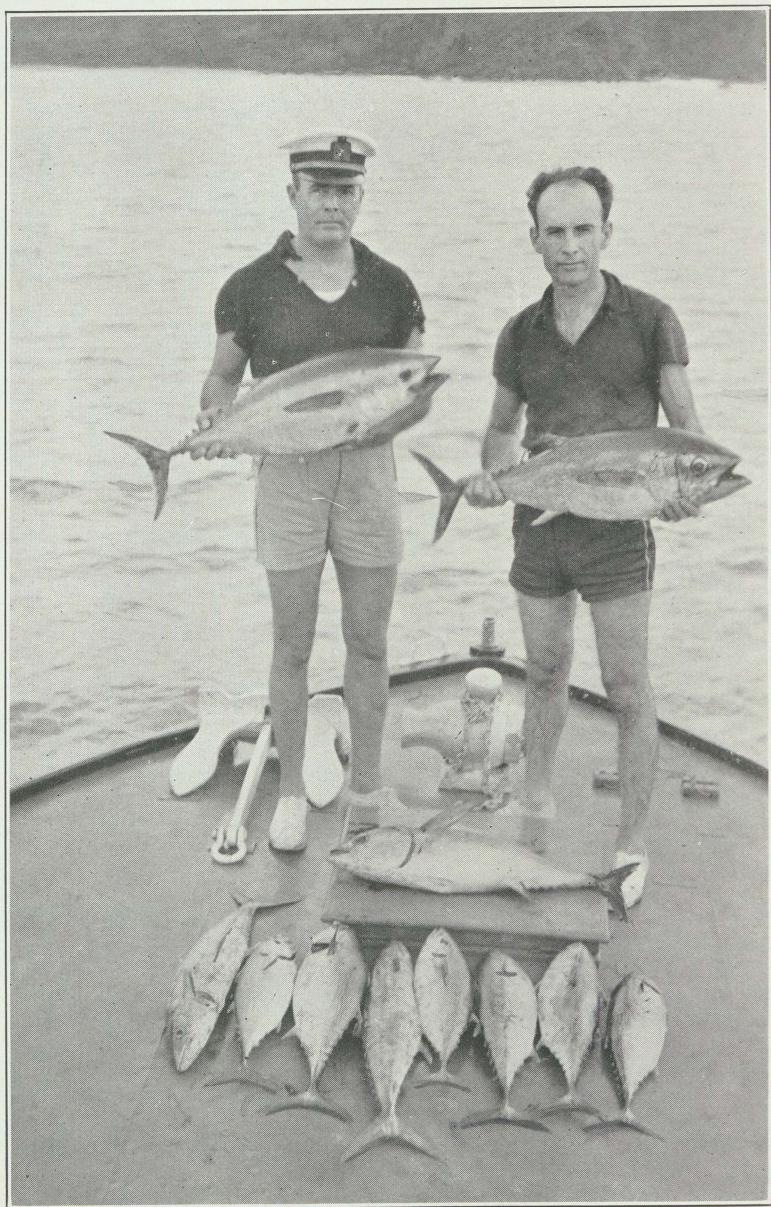
Tuna are most apt to expose themselves on mild days. Sport fishermen then hunt them. Apparently, these fish are easily frightened, for even the waves created by the action of the boat causes them to sound. When water is rough they remain below the surface and the bait is trolled "blind". Luck must attend to furnish the desired "strike."

TACKLE—Practically the same extra heavy fishing equipment as that described previously for marlin is required for tuna. It must be sufficiently strong to hold a quarter-ton,



WORLD RECORD
YELLOW FIN TUNA
WEIGHT 170 LBS
CAUGHT JAN. 30th 1936
BY DAN STEBINS

BEERS PHOTO CO
MIAMI, FLORIDA



Capt. Luis Sentella

Don Vicente Balboa Pena

Small tunnies are plentiful off the coast of Puerto Rico.

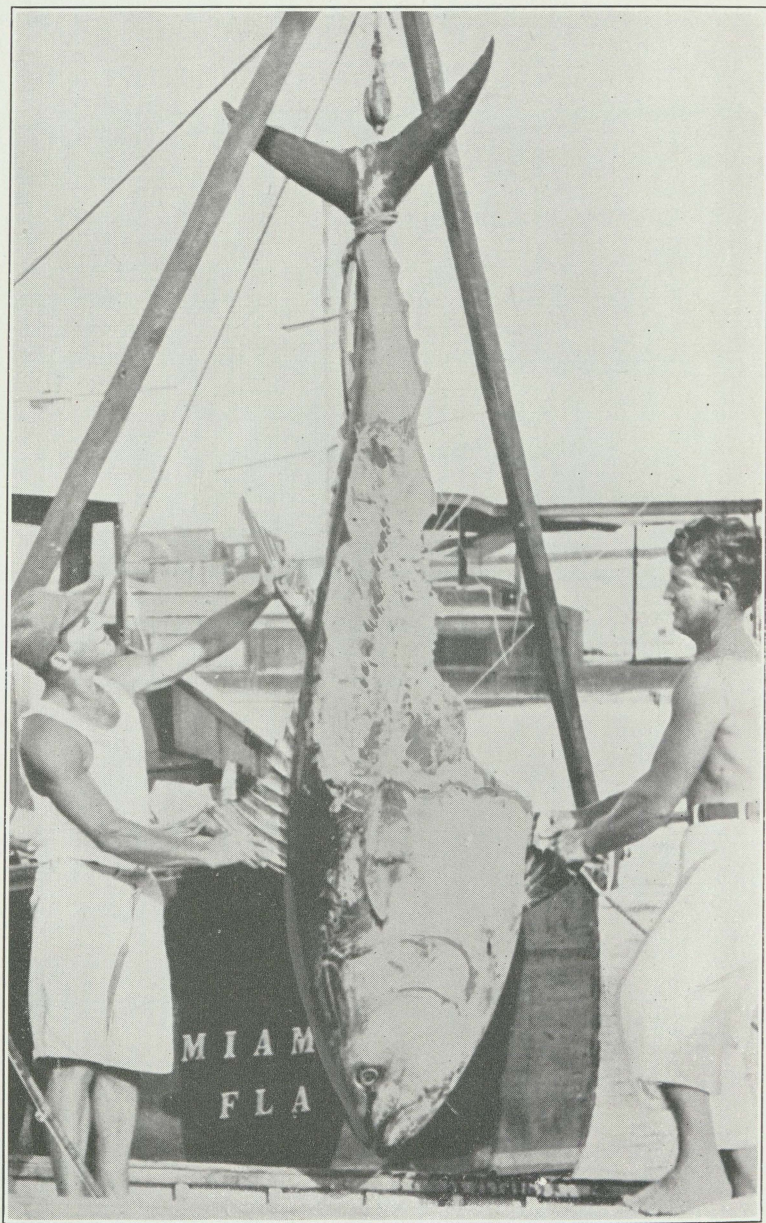
speeding marine-monster whose power and endurance are unlimited. They have an effective and connected power of resistance which appears to increase, rather than decrease.

The finest grade of heat treated hooks, made from heavy steel-wire, with point paralleling the back (not turned slightly, as are tarpon hooks) are essential. This is attached to a 15-foot length of strong, cable leader-wire.

BATTLING QUALITIES AND TACTICS—Nothing else in the entire ocean is more capable of displaying perplexing exhibitions of quickness and skill in movement. From the first moment contact is made by this firebrand fish the angler becomes terrified with amazement and confused with astonishment. The fish's first act causes the angler's emotions to become upset; he is thrown into complete mental and physical disorder. The reveller cuts through the waters like an apparition, tearing off a thousand feet of line before the angler can have any thought except to prevent his expensive tackle from being utterly destroyed. There are authentic reports of tuna jumping 20 or more feet high, after the first violent attack removes only a hundred feet of line; but usually the first act of hostility is a tremendous rush seaward, like a sustained charge of an infuriated bull. Both angler and fish furnish a sight dreadful and sublime to behold from the sidelines. Zounds! This works a tremendous hardship on the sportsman, and he pays for it with early physical exhaustion. A tuna's merciless and ferocious ability to punish the angler, who bears the brunt of the violence, is marvelous, indeed.

The skipper's command to "sock him a half dozen times" is heeded, but unconsciously. By the time the stupefied and discomfited angler comprehends his awful predicament the gigantic fish has sounded. No amount of effort seems to avail in getting it off the bottom, but finally it may decide to come up of its own free will.

The first hour of unchecked, steady flight during a battle with the pelagic monster may be only the beginning. It combines cunning and gameness with strength and strategy as wearying hours pass. Not for a single moment does it relinquish its belligerent efforts; nor does its bulky, massive, ponderous weight retard its effective action or motive power in the slightest. You are left alone, as good angling ethics



GIANT TUNA "RUN" OFFSHORE NEAR BIMINI

An endless struggle for existence goes on underseas. Even the most powerful oceanic goliaths are not immune. Most dreaded in this terrible life-and-death warfare are the fatal attacks of carnivorous sharks. This hazard makes it almost impossible to bring in a prize catch "whole", un mutilated. Note this giant tuna's carcass: it fought valiantly at the end of the angler's line until death-blows in the form of huge chunks bitten from its side caused the victim to weaken and end the contest.

dictate, to take your prize "legally" or end with only a magnificent memory.

The smaller fellows, up to about 150 pounds, are often conquered after a couple of hours by intensive effort; but the large, human backbreakers have been known to continue battling fiercely throughout the night—for more than sixteen consecutive hours.

FOOD—The flesh of the tuna is highly esteemed for its exceptional food value. Who has not eaten canned tuna?

(GREAT) BARRACUDA



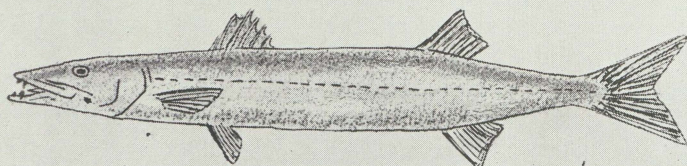
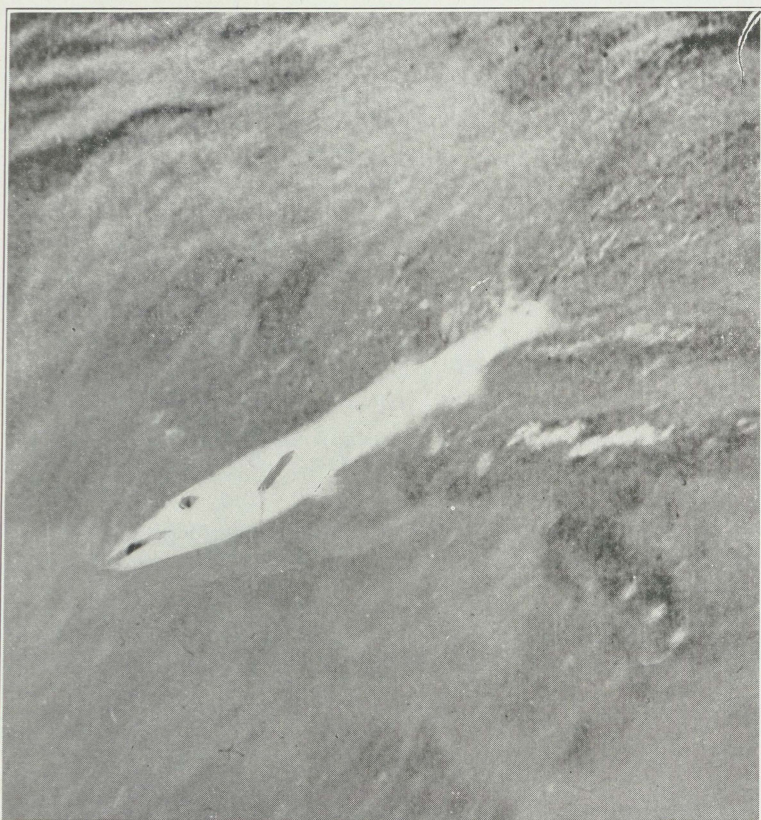
BECAUSE of the savage traits attributed to the shark it is generally thought to be the sea's most dangerous aquatic animal. Captain William E. Young, in his 30-year odyssey of a pioneer shark hunter, *Shark! Shark!* (published by Gotham House, New York, 1934) gives accounts of sharks' bellies containing parts of human bodies. His book includes pictures to substantiate his affirmative answer to the question, "Do sharks attack human beings?" But we have heard that a famous submarine explorer and scientist of international fame is willing to risk his reputation that there is no authentic record or proof of an original bite of a *living* human being by a shark. Whether or not this is substantiated, the fact remains that some of the many sins attributed to the shark are really the cannibalistic doings of the oceanic war lord, the barracuda.

Sharks are not as apt to attack human beings as are barracudas. The shark bite is arch-shaped, as shown on the photograph of tarpon on page 149. The barracuda makes a saber-toothed cut across its prey's limb or body. The shark depends largely upon sensory cells which are specialized for smell. The barracuda's ever-prying eyes reveal its prey; it charges fearlessly and unhesitatingly at light colored objects and leaves or ignores its stricken, helpless sufferer after a single attack.

Tropical residents of the Florida keys and lower mainland coasts and also those living in the islands of the Carribean sea justly condemn the *sphyreana* family (which includes the barracuda) whose instinctive, murderous traits fills these people with terror and bodily fear.

In common parlance this species is sometimes called "Sea Tiger", a nom-de-guerre well deserved. Professionally, it is the "*sphyreana barracuda*". The Great Barracuda, of whom we speak, is oceanic public enemy #1—the most improvident, reckless gangster and roughest, toughest murderer and the most blood-thirsty pirate of the reef.

They inhabit the lower Atlantic waters of Florida and the West Indies, being plentiful along edges of the Gulf Stream, and also around patches of coral, reefs, sandy bottoms, wrecks, pilings and buoys. Some are found in spots in the Gulf of Mexico on the Florida West Coast. The larger ones are in



GREAT BARRACUDA $\frac{1}{6}$

GREAT BARRACUDA
"The Tiger of the Sea"

This slimy, cannibalistic evil-doer is oceanic public enemy number 1. It is by all comparison the most improvident, reckless felon, the roughest and most treacherous menace on the reef. What it lacks in good qualities is made up in sheer ugliness, cruel and despotic traits. To add to its sinister grimness pointed, rampageous jaws carry conspicuous, extended, dog-like incisors. Whatever its big, black eyes behold is considered its legitimate prey. Nothing, even if larger than itself, is spared, notwithstanding this glutton may have just partaken of the heaviest meal in its entire fish-existence.

(This remarkable photograph was taken in about a 30-foot depth of the crystal-clear water near Cat Cay off Bimini).

deeper waters a few miles "out" in the Gulf Stream, while smaller individuals inhabit shallow places.

BUILD AND SIZE—The slimy body length of these pike-like evil-doers is usually about three feet long. The average weight is six to twelve pounds. In very rare instances they exceed fifty pounds. A record barracuda of 53 pounds was caught in the Gulf Stream off Fort Lauderdale. This was exceeded when, on April 18, 1934, Mr. A. H. Peterson caught one near Miami Beach weighing 64 pounds. The author has caught a number of them between Key West and Dry Tortugas tipping the scales over 35 pounds, these averaging about five feet long.

Above the lateral line barracuda are a light grey or almond green. Below, the sides they have tints of coral and pink. The belly is eggshell white (and in emergencies it is cut into bait strips). Fairly large scales, 75 to 85 in number, cover the body, which may have a number of irregular inky black spots on the sides. On some of these fishes, however, the spots are almost invisible.

The barracuda's long, slender build makes it a perfect marvel of grace and speed. It lies stealthily in tropical waters, seemingly so perfectly at ease it may be having a pleasant day dream. In reality, however, this sly fellow is only posing; he is always ready for instant action. Conversely, he slinks from sight without even causing a ripple on the surface; having the agility of a cat, he moves under water with the ease and grace of a ballroom dancer.

What the barracuda lacks in good qualities is made up in sheer grimness and pure ugliness. Its head is a long, rakish affair with pointed, rampageous jaws, the lower part of which is a protruding thing designed to carry its conspicuous, dog-like teeth, these being at intervals in the upper portion, too. Huge, lead black, extensive eyes are set behind the upper portion of the great head which, with its thick lips, add to its formidable appearance. Whatever these big, observing organs of vision behold, the barracuda considers his legitimate prey and promptly acts accordingly.

TRAITS—When an unwary fish saunters out of its retreat onto the watery oceanic streets, something terrible springs at it. The wanderer returns home no more. Anything which comes within sight is not spared by the barracuda, even though

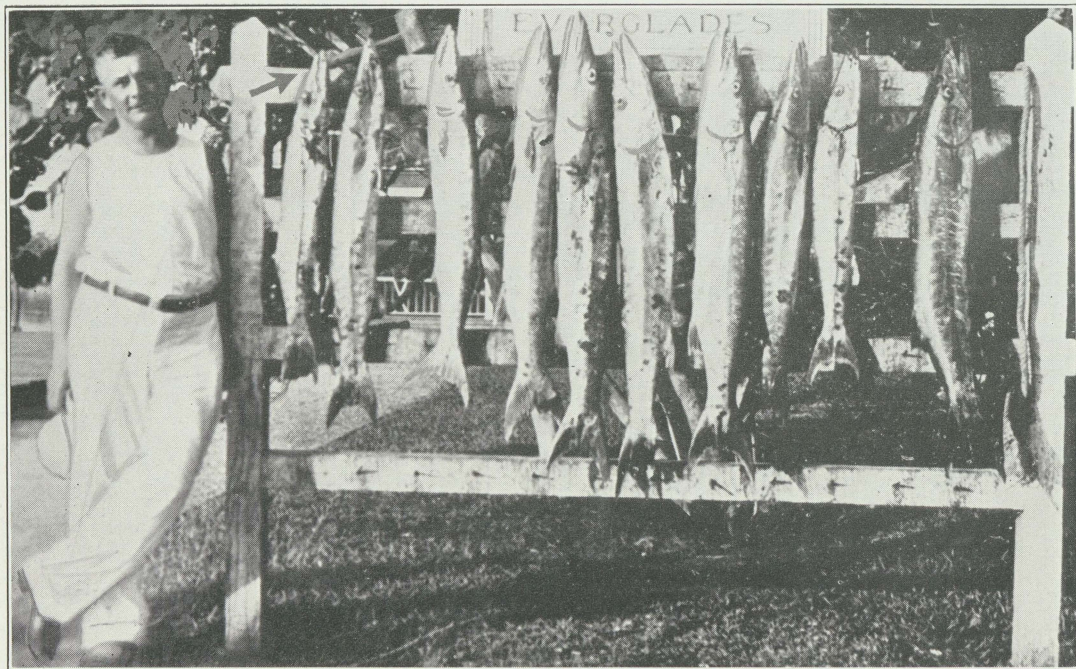
he has partaken of the heaviest meal in his entire fish-existence. With startling rapidity this chisler attacks, his fury and courage unlimited, even a metal trolling spoon, a plug, chunk of fish or a live bait. A white rag or feather-jig trolled or jerked brings him up for immediate attack with grim nonchalance.

Equipped with nerves of steel, this notorious wrecker is more cruel than the old Spanish torturers even were known or reputed to be. No amateur, he is taught from infancy to look innocent, to be sly and cunning. The barracuda employs more smoothness, skill, treachery and savage traits and is a quicker actor than any water or land animal.

Sometimes the breed runs in large schools. Then hundreds of their pointed muzzles ingloriously await anything, dead or alive, they can tear into. They are more fierce than a pack of wild tigers, and certainly more rampant. Their ugly teeth exposed, they resemble a lot of mad dogs, except that they have more of these weapons, all situated in long, unequal rows, so they can more effectively accomplish their murderous intent. With one fell swoop they sink these fangs into their prey, rendering it helpless in an instant. Then, like a pack of wolves these fiends in fish form destroy and devour their victim. Their valor verges on fool-heartedness, to say the least.

Capable of tearing a human being into parts, nothing would afford him more pleasure than to rip off a limb in a single dash. The inglorious species does not hesitate to pounce upon larger prey than itself. When his own blood-brothers are hooked by a deep-sea angler this close relative is attacked as quickly as a starving man eats fried chicken with trimmings and hot biscuits at a banquet.

They display an utter contempt for their own safety. The superhuman force and tenacity which they call to play in battle usually permits them to emerge victorious (in which respect they are without a peer), unless it be at the hands of an avengeful angler. Physical pain has no place in its life. The author has ripped barracuda bodies struggling at the boat with a butcher knife; immediately they swam off, as though nothing in particular had happened, and were recaught on a piece of one of their own bodies as bait. Of such stuff are they made!



WEST COAST BARRACUDA

A few of the ravenous, marine war-lords taken at whistling buoy No. 16 FIW in the Gulf of Mexico, 25 nautical miles southwest of Everglades City and about the same distance west from Chatham Bend. (U. S. C. & G. S. chart No. 1254, latitude $20^{\circ} 40'$, longitude $81^{\circ} 39'$).

With the instrument (mallet) called a "persuader", shown at the left-top of the fish rack (arrow pointing to it), the heinous villain is justly and promptly exterminated. Were this not done the fanglike teeth of these diabolic fiends would slash ugly gashes across or do worse physical damage to humans aboardship.

The inexperienced will do well to make due allowance for the abnormal havoc and consternation the vicious actions this species can cause on deck. The best procedure to prevent injury to anyone aboard is rudely to assassinate and remove the barracuda.

“PERSUADER”—For Mr. and Mrs. Barracuda’s special benefit your author carries on all deep-sea expeditions an instrument or mallet known as a “persuader”. Captain Appleton Sawyer (who prefers to be known simply as “Happy”), of Key West, calls it by a more pleasing term—a “comforter”. This piece of equipment possesses the qualities of both, for with it a single, well-directed blow upon the fish-criminal’s head renders it less liable to rip us open or plant an ugly gash on our body with its rows of sawlike, savage teeth.

This mallet is made of hard rubber. It might well be constructed of iron except that the barracuda (which has instinct, in addition to his other characteristics) suspects, and frequently jumps clear of harm’s way at the precise moment the execution is to occur. A miss, therefore, might result in the weilder of the mallet knocking a hole in the bottom of our craft if he misses the villain.

For best results, our intimate and expert fishing companion, Judge Herman Goldstein, maintains that the “persuader” should be raised to an extended height, as far up as the arms will reach overhead; then brought down on the barracuda’s “bean” with all the human force possible.

“Admiral” Sidney Jacobs, no less efficient, on the other hand suggests that about one-half the above procedure is necessary. The remaining effort, he claims, should be put into additional force behind the mallet.

The author, not wishing to dispute the efficacy of both methods, takes a medium position in the matter. Each angler is permitted to demonstrate his favorite practice in terminating the life of these treacherous fiends. The devout members of the Fraternity make due allowance for the special practices of fishing buddies.

“REBECCA LIGHT”—At this little frequented, off-traffic-lane point in the treacherous and dangerous straits (about 40 miles West of Key West) is a buoy. The perilous maelstrom is, indeed, suited to these gruesome, marine culprits. It is the

meeting place of great-grandfather-size barracuda. This watery waste is ideally suited to the gruesome marine culprits inhabiting it. If these fish grew whiskers because of old age, each of those at this point would have a full set. So many of them congregate here that they promptly exterminate anything which appears among their vast numbers.

On one occasion we had just returned from Dry Tortugas. Our provisions were exhausted. The waves rocked, battered and twisted our little 26-foot cabin boat until, to please the elements, this craft turned itself in all directions simultaneously. To ease our minds, we had put out a feather-jig, hoping, perhaps, a "strike" would make our perilous situation less of a strain. A 6-ounce, bamboo tip, with a 12-thread linen line was used first. Before the day was over, we had used every available piece of line, hooks varying in size from 5/0 to 11/0, and while the elements tossed our little conveyance around like a cork, we busied ourselves exterminating barracuda. Aboard were the two devout fishermen just mentioned, with Captain "Happy" Appleton Sawyer and Broward, his son and mate. The skipper performed the grand rites by perching himself on the rear end of the boat. His toes were bared.

Within a few minutes after the first of these fish "struck", Cap'n. 'Appy carved its carcass into seven or eight chunks of generous size, threw them overboard, and behold! this "chumming", intentional or otherwise, caused the near and distant relatives of this deceased fish to assemble. In less time than it takes to relate the incident, the mourners numbered several thousand. Catching barracuda became a routine; and when it appeared that more than the several hundred "boated" (and carved up, to furnish additional bait) were only the beginning of the session, no other than the Captain himself called a halt to the carnage.

"All yer wanten do is ketch 'em sea-debbils", he commented, loud enough for us to hear. "Broward", he says, "see kin yer fite this here blow en git outer thes place. Where's the second buoy, Broward; find the second buoy"! And, to add emphasis to his instructions to our navigator, he added, "Dese fellers don't know when ter quit".

The author could not help noting that, before the day was over, the skipper resorted to the use of the "comforter". Instead of making from 6 to 10 parts of each barracuda, as in the forenoon, he merely "cracked" each one with a resound-

ing wallop before severing its body in half, and tossed the unconscious form overboard. This became the tribal custom at each fish-funeral.

We ignored these comments and continued jerking sea-gangsters upon the deck until all elements of sport ceased to exist. It compared favorably with the slaughter of human cannon fodder on Flanders' battlefields. Obedient to the Captain's orders, Broward, without further instructions, started up the motor and we moved toward Marquesas Key to spend the night.

In fairness, let us remark this was the only thing to do. But, confidentially, you are informed that some day our intention is to revisit this bouy. When we do, we will come armed with enough tackle to clean up the place.

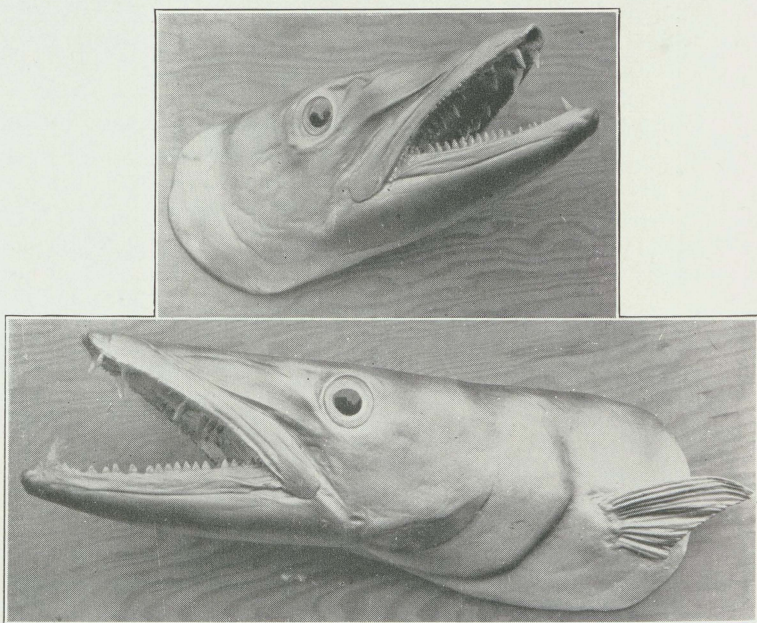
The incident reminds us of the old reference to the Irishman. It was in the days when saloons were frequently and freely patronized. This particular native of the Emerald Isle staggered into the sawdust-covered establishment and his blinking eyes discovered two men violently tearing into each other on the bar-room floor. Both, he perceived, were bloody. Each appeared to be twisting himself around the other's form furiously, trying to get a position for himself which might enable him to lash his assailant unmercifully. After viewing the spectacle as long as he could tolerate it, our hero from the snakeless regions felt himself unable to further restrain his neutrality. "Is this a private fight," he inquired, "or can anyone join in?"

So it is with barracuda. Except, it should be noted, he is not courteous; he makes no inquiry before he bursts into a hooked-fish with uncontrollable sagacity and force. Consequently, many a specimen would be brought on deck, half or more of its body missing, or a series of deep, ugly gashes torn across its body, due to our prey's inability to get away from the sea-devil's attacks.

For human beings some persons believe the barracuda has poor food value. In Cuba its flesh is considered poisonous. The City of Miami has a legal penalty for its sale as food. Others who are authorities deride this theory; besides, the author has seen Captain Sawyer, above mentioned, fry and eat barracuda steak without any ill effect afterwards. Its principal use after being

caught is to be reduced to parts and tossed overboard for its relatives to feast upon, as illustrated above. This brings up thousands of them to the scene of operations, furnishing endless sport.

WARNING—Beware, you who feel the urge to take a plunge into the invigorating waters at such points. You may pay dearly for your recklessness in places where there are buoys, wrecks, rocky-reefs, and similar places. Beware of these alert swashbucklers!



THE BARRACUDA'S HEAD

It is a long, rakish thing with pointed, rampageous jaws. The lower part contains the rows of numerous, conspicuous, doglike teeth. Additional incisors appear at intervals in the upper portion also.

Thick lips and a pair of huge, lead-black extensive eyes in the upper part of the head add to its formidable appearance.

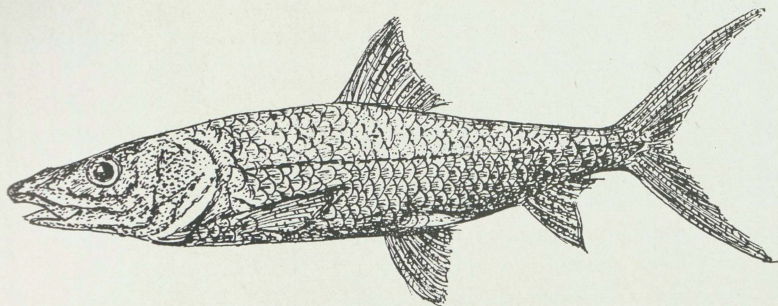
BONEFISH



LIKE AWAKENING from a fantastic dream (after our experience with the great barracuda) we bow to a dapper, sleek little piscatorial creature. His royal shyness, the bonefish! Graceful, handsome, energetic and splendid in game qualities, he is *le beau ideal* of fishdom. Ichthyologists refer to him as *albula vulpes*.

DESCRIPTION AND CHARACTERISTICS—Suspicious and temperamental to the —nth degree, this neat, symmetrical friend weighs but two to five pounds, average. The largest specimens are as much as ten pounds maximum weight and about 2½ feet long. A bonefish which weighed 13¾ pounds, being 31 inches long, with a girth of seventeen inches, was caught March 9, 1919, by B. F. Peek, near Bimini. This is the world's record.

Although both have lots in common, often inhabiting the same kind of temperate waters, this princely, unique dignity of oceanic royalty is not to be confused with its lady-in-waiting, the ladyfish. Bonefish are related to the herring family. They have an elongate body, which is sub-cylindrical and streamlined, covered with small, silvery scales like mother of pearl. It is adorned with a pair of large, startling eyes. Except for its small mouth and lack of a whiplike fin after the dorsal fin, bonefish might be said to resemble miniature tarpon. The mouth is placed under a piglike snout; and back of the mouth are very hard teeth. A fine network of gillrakers enables it to sift its food—worms and small shell animals sucked by

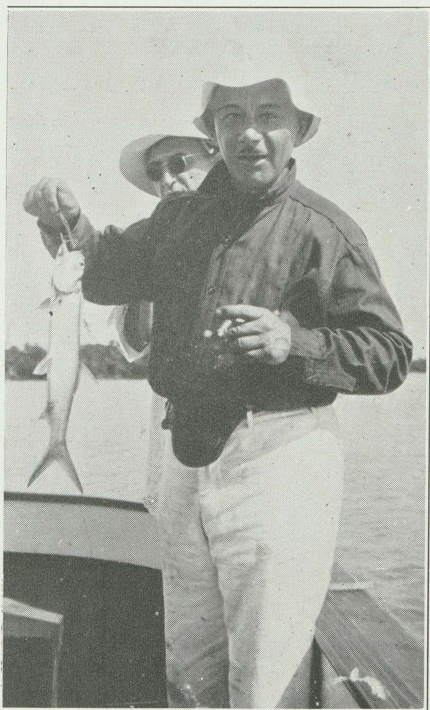


BONEFISH
(1/3 average size)

them out of the mud and sandy bottoms. In general the daintiness of the bonefish reminds one of a budding debutante in an evening gown of radiant steel. A single soft-rayed dorsal fin appears in the middle of its back. Its caudal (tail) fin is proportionately large—it is this fixture which sends it through the shallow waters which it inhabits with such speed that this makes it a special attraction for sport fishermen.

The bonefish does not have the usual means of self-protection such as hard shell, spear, strong spines, ability to adapt its color to mud, sand or weeds where it hides. In lieu of these it is possessed of unusual strength and is capable of moving with tremendous velocity to escape its enemies.

Very skillful efforts are required, even on the part of experienced bonefishermen, to induce this timid fellow to remain in the vicinity long enough to be enticed to accept the lure. But when patience is rewarded with a "strike", it takes off on a run with vigor and startling effect.



THE DAINTY AND ELEGANT LADYFISH

Closely resembling the bonefish, these sea nymphs are equally as hard to snare. Siren-like they have a disappointing characteristic of dislodging the hook just as the angler reels them up to the boat.

During the 1935 Fishing Derby at West Palm Beach, Chester Ohman, of East Hampton, N. Y., held fast to a 4-lb., 13-oz. ladyfish. For his expertness he was awarded a trophy.

To become proficient in this art one must first be blessed with the patience of a saint. The slightest whisper, an unusual ripple on the water or other minor disturbance frightens off this sedative one quickly. The quality to remain absolutely silent and steady, plus instant action at the psychological moment, makes for success in this highly-scientific fishing interest.

HABITAT — Their principal habitat is on banks and bottoms in warm shallow waters, $1\frac{1}{2}$ to 3 feet deep, where it is sandy,

claylike or even muddy. At times bonefish are discovered in broadleaf marine grass. Few who know his exact residence are proficient in angling for bonefish. Those who possess the valuable information as to the whereabouts of this solitary, elusive fellow do not always willingly divulge its chosen and preferred locations immediately. This is because they probably have spent tireless, long, weary hours (plus an untold amount of effort and money) locating and studying the habits, habitat and characteristics of this brisk, speedy fish.

Several places in the Florida Keys might be productive of results. The banks of Rodriques Key and Trestle #2 (near Long Key); a couple of places around Tom's Harbor and the shoal at Key Vaca channel, or bank off Boot Key are suggested.

But for the devout fisherman who desires bonefishing there is one region where success is assured if the prescribed rites are observed: The author recommends the most eastward of the Bahama Island group (reached by crossing the Gulf Stream, some 50 to 60 miles east from Miami or Palm Beach), in the part of Bimini called Alicetown. This region comprises perhaps a hundred square miles of the world's greatest territory for bonefish. The great body of water has an average depth of about 1½ feet. Its sandy bottom is crab and conch infested. Here bonefish live the year 'round, in abundance.

To this favorite of all bonefish territory anglers come from all parts of the world. Sailboats of an earlier day are used exclusively for this fishing, because no noise is caused by the boat as it glides smoothly and silently through the shallows.

Isiah, a native negro guide, has attained national fame for his expertness in bonefishing. On the author's first visit there this competent authority was induced to initiate us into this, one of the most pleasant phases of all piscatorial endeavors. His instructions were carefully heeded. Conch-bait, crushed by Isiah with his own teeth, making it tender, was used . . . and the author was enabled to lay claim to 8 of this species within a few hours. This splendid catch is not often duplicated.

On this occasion Major Wm. R. Stickman, U. S. Cavalry and the author were guests of Dr. A. W. Chappel, of Miami (then the owner of the yacht "Pal-O-Mine"). The doctor rowed the author to a choice location. Only after noting our success was he convinced of our expertness with these fish.

TIME AND TACKLE—Summer is considered excellent for bonefishing. Some enthusiasts claim that any month from February through June is just as good. The author has noted that these fish are very active in midsummer on Bimini flats.

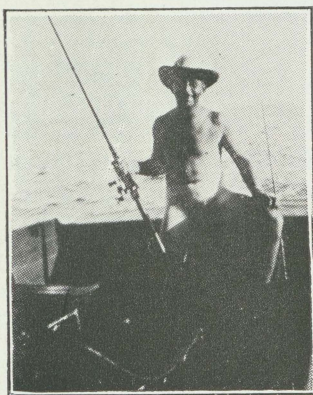
They feed on rising or incoming tides, usually just after the first "flood". The conditions, that is, weather, tide, craft and equipment must be right,—no heavy winds to disturb the waters. "Not even fleeting clouds to cast suspicious shadows or images on the water; even soaring birds may drive him off" comments a noted authority. Their natural food may be a hermit crab, a conch or similar crustacean, or a worm. These it "roots" up with its head down on the bottom, and tail sticking up, almost out of the water. Grassy flats, and bars where the water is both shallow and quiet, are frequented, too. The species is so sensitive that even when using crabs for bait the mere breaking of the crab's shell must be muffled. (It might be in order here to offer someone's caution against injuring the crab when breaking its shell; break off the claws, then press the hook gently through the head or hard part of the body.) Small pieces of bait, cut up into sizes of peas, may be "chummed" in the most likely spots.

Very light tackle is required. A short butt, bamboo rod with 3-ounce tip and large, free guides, is sufficiently heavy. Size 3/0 or 4/0 hooks; light weight leader wire, about two feet long and #1 swivels are best, with a lead sinker attached near the bait to hold it steady where it is cast or laid. Most bonefishermen prefer a six-thread line 250 to 300 feet long and a free spool reel, a thumb-brake being used. The author uses a spool of tailors' waxed, twisted sewing thread. This kind of line must be changed frequently. The strain is more than it can take after a couple of strikes. The first strike is faint; it frequently passes unnoticed, until the angler becomes accustomed to the feel of the rod-tip. If you are quick as a flash, and strike back with a firm but delicate effect, you may succeed in hooking the bonefish.

The dainty little fellow dashes off—50 to 150 feet—and the line parts company from the reel in a split second. Behind its dash is a trail of muddy water, showing his initial spurt is in a straight, forward direction. Successive rushes and sprints may be to the right or left or towards the boat. No

hard pulls, but merely a taut line and quick action are necessary to keep control of the situation and restore the slack on its accustomed place on the reel. Not infrequently the bonefish will circle the boat, indicating that it is tiring and is soon to give up the struggle.

For those who enjoy the peace and quiet of fishing, almost in solitude, this species offers the utmost pleasure. It is the answer to the devout angler's prayer.



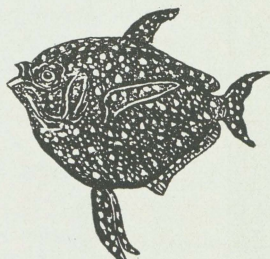
Anglers do not habitually costume themselves for display as dictated by mankind's customs, but rather in the marine wilderness dress (or undress) for pure comfort and pleasure.

DOLPHIN



EVERYTHING in nature has a species of its division which is more favored for its beauty than all others in its genera. Examples of this are the peacock and butterfly on land. And amongst Fashionable Fish Society (Game Fishes) nature overdid itself in lavishing artistic coloration on the dolphin. This fish is of the genus *coryphanena*, family *coryphaenidae*. It has fairly good food value.

COLOR AND BUILD—Nothing in the entire ocean is quite so truly gorgeous as these “Angels of the Sea”. Their celestial-like, many-hued, glittering bodies give them this deserved designation. The elaborate decoration of the butterfly is outrivaled by this masterpiece of the marine world. In sheer gorgeousness it compares favorably with the opah¹



OPAH
(1/40th average size)

Various dominating shades may be found in dolphin. The principal color constants may be a combination of sea or jade-green, verdure or gold—all, or blends of these. One of the chief characteristics of the graceful swimmers is to cut through the seas in the most fantastic, spectacular fashion, when after prey or hooked. On such occasions they often clear the surface

¹OPAH (*Lampris luna*)—There is an immense highly attractive, moon-shaped fish inhabiting deep stretches in tropical and temperate waters and in the mid-Atlantic (especially near Madeira island off the Coast of Morocco; also near the Azores islands) and mid-Pacific oceans. It alone constitutes the family “lampridadae”, meaning bright, shiny. They are very rapid swimmers. Moreover, they are unexcelled for food value.

Its large body is covered with minute scales—giving it a smooth appearance—and is deeply compressed and plump, almost oval shaped. A high anterior dorsal fin rises and runs along nearly the whole of its back. A high-rising dorsal fin protrudes about midway on top of this fish; and an attractive pair of extra long abdominal fins hang from its belly, these being followed after an interval by a fin running underneath continuing almost to the tail. The caudal (tail) fin is deeply cleft and very strong, furnishing it with power to move quickly and with ease. The average weight of this species is a hundred pounds, and it averages four or five feet long. Some have been reported to weigh more than 500 pounds.

The opah is considered the most marvelously decorated creation in the whole of nature. Its riot of coloration and gorgeousness surpasses even the dolphin. Its dazzling costume is a harmonious combination of the most delicate shades. Above, its body is steel blue or bright green; its sides are variously reported as being violet, cardinal or phantom red—some with deep golden and turquoise tints blended with green or china blue. The fin tips are scarlet. Underneath, it is adorned with dark hues, such as wild rose, raspberry; silvery splashes and dots of purple, burnt orange and other beautiful combinations make it a supreme achievement in beauty.

The author has never been privileged to contact one of these gleaming bodied denizens of the oceanic abyss. This is an ambition to be realized some day.

several feet, exposing their vain and showy bodies. Dolphin are especially gifted with the unique power of changing hues, noticeable particularly when emotionally upset. Then a series of vivid blues, crimson, bright, glowing lilac and sea-greens and other rich aquamarine, pastel hues and primary colors of the rainbow are displayed.

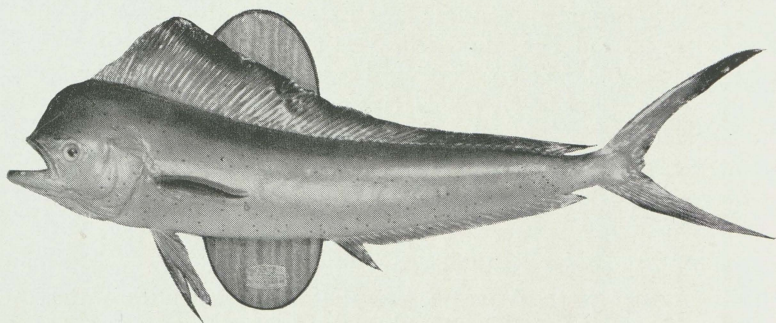
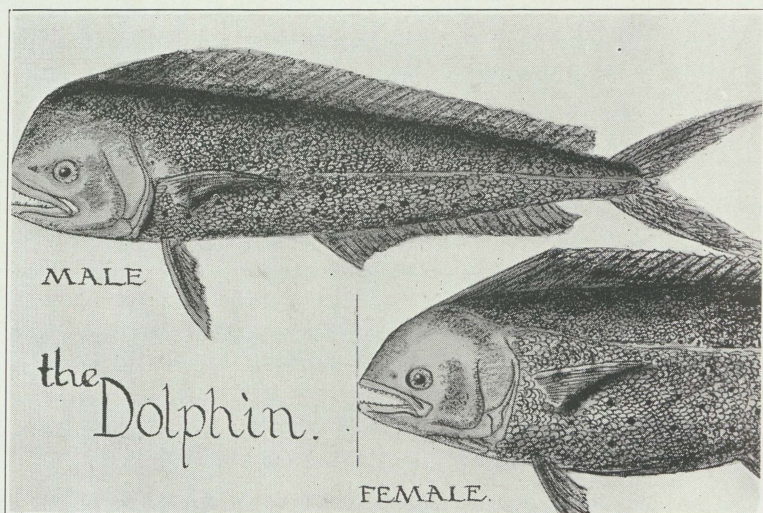
“Bull” dolphin are the choice specimens. The male is often plum or bluish-gold. Its weight may be as much as 40 pounds or more, and it grows up to 6-feet in length. All males are determined by their high, prominent foreheads; it rises straight up from the lower lip, and about halfway up it tapers backwards, just slightly, toward the “shoulder.” Its fins are a golden hue.

The female dolphin is saturated with color. She has an emerald and gold body, combined with varied contrasting shades. Her head is not as sheer rising as her mate; it starts upwards from the lower lip for a very short distance and then tapers backwards. Nor is her head as “thin” as the male’s.

Equally as handsome as its outer decoration the dolphin’s bodily form is the most showy and elegantly constructed of all fishes. The forepart of these are extremely thin and blade-like. Just behind the dignified, vertical head a magnificent, elaborate spiny dorsal fin rises and continues the entire length on top of the trim body. This fixture is richly colored, royal blue with a hint of lavender or violet. The body is spotted or streaked with dots of darker shade, setting it off like a diadem. At its rear the body carries a prominent, deeply cleft, strongly built, wide tail or caudal fin. This rear fixture is almost black.

HABITAT AND BAIT—They feed principally in large schools in the lower Atlantic ocean and West Indies waters. Rare specimens are seen in the Gulf of Mexico as far north as St. Petersburg. These attractive frolickers are frequently found near sea weed in their native habitat—the Gulf Stream. The smaller ones are usually near the surface; the big fellows remain deeper.

To bring them up and engage their attention a few chunks of fish, about half the size of a man’s hand, may be “chummed” and thrown overboard while trolling slowly or drifting with the Gulf Stream current. It should not be long before several dolphin make spectacular jumps to beat their rivals to



"BULL" DOLPHIN

Length $5\frac{1}{2}$ ft. Weight $32\frac{1}{2}$ lbs.

Desiring an adult "bull" for mounting . . . He takes his place with appropriate honor opposite other specimens in the author's mounted collection.

the nourishment. They clear the water for long distances which affords an impressive sight as their ornamental bodies glisten in the tropical sun. Once at the surface any of a variety of baits, whether artificial of wood or metal—such as plugs, spoons, feather jigs—or cut bait, and even a white or red rag (hiding the hook) will produce quick action. Barely is the lure allowed to touch the water before a dolphin springs from nowhere in particular. It lands squarely upon the bait from a leap fully ten or twenty feet. Rarely does one miss the target! Then, others follow quickly, outdistancing each other in jumping high and far to be the first to gulp the bait.

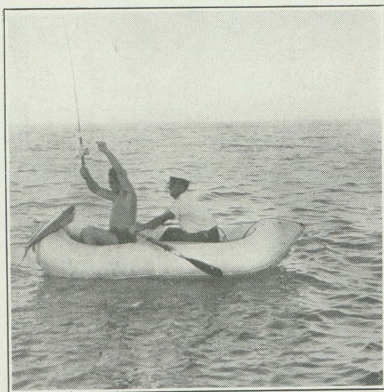
Dolphin are the fastest swimmers in the entire oceanic realm. They possess the speed and power built in racing motors, and are easily capable of developing the amazing speed of seventy five miles or more per hour. They habitually and constantly travel in the seas.

TACKLE AND GAME QUALITIES—In angling for dolphin exclusively, (that is, if no other “stream” species are being sought at the time) light tackle may be employed. A 6-ounce tip is reasonably heavy, and about 250 yards of #9 or #12 thread line is ample. At the end of this line the dolphin is the liveliest bundle of animated fury and grace fishermen’s luck ever perceived. Those who have been permitted to visualize dozens of these radiant marine performers are fortunate. Only they can appreciate the acrobatic feats and understand the intense pleasure of fighting these rainbow-like creatures.

The first one of the school that is hooked is carefully but quickly brought alongside. The skipper-captain or mate removes the baithook and ties the fish to the boat-end with some 25 feet of strong hand-line; then it is thrown back into the water and allowed to swim about, while the boat drifts. This method encourages others to follow along. Thinking one of their near-relatives is in distress (a correct assumption) the remainder of them are expected to remain in the immediate vicinity. If they do, it is not infrequent to boat or release half a hundred dolphin in an hour’s sport. The action is very rapid and exciting. During mid-summer months, when the surface of the Gulf Stream (not far offshore) around Miami and “down the Keys” is heavy with sea-weed, such places may be literally “full of them.”

RECORDS—The largest dolphin on record, weighing 63 pounds, was caught on March 17, 1930, near Tahiti, by Zane Grey, the famous world-traveled angler. While compiling data for this manuscript the last of December, 1935, the author was one of a party guided by charter-boat Captain Bob Luderma, of Miami. About nineteen miles north of Miami Beach, some ten or twelve miles in mid-Gulf stream, we cast overboard the unwanted parts of fish from which baits were cut. Like a flash there came from the deep, blue waters a gorgeous fish,—a flashy dolphin, female. Her mate, seeing another bait idling close by, was upon it. Both fish were landed in due time. The male's head was as thin as a plow blade and as big; he weighed 48½ pounds. The "lady" was sixteen pounds lighter but she put up as good a tussle as anyone might desire. Just a few months prior to this episode a 55½ pound dolphin was caught near Miami Beach by Norman W. Fort, Jr.

Several years ago the author desired a medium-sized adult "bull" for mounting. It required two days of diligent effort to locate and secure one of these royally costumed, glamorous sea beauties. Its emerald-topaz body, when caught, was interspersed with a number of electric blue dots about one-quarter inch in diameter. Time and time again during the hectic struggle, which lasted well over an hour before the gladiator could be subdued, the fish exhibited a series of color changes which still live in the mind's eyes. To its captor this specimen proved to be an especial dandy, his measurements being 5 3/4 feet long and weight 32 pounds. He takes his place, with appropriate honor, opposite the other fish trophies in our mounted collection (thanks to Al Pflueger, taxidermist, Miami).

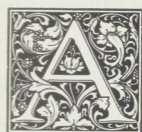


CATCHING DOLPHIN ON A RAFT

The elaborate decoration of the butterfly is equaled by these masterpieces of the marine world. Nothing in nature is more truly gorgeous in exquisite coloration nor possesses greater speed than the "angels of the sea".

Fighting a 12-lb. dolphin with light tackle from a rubber raft furnished this angler utmost delight. Their color changes and spectacular running broad-jumps, clearing the water, could be observed at close range.

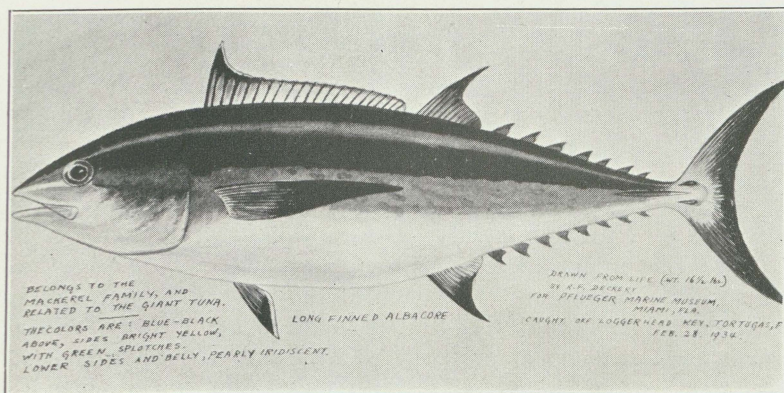
THE MACKEREL FAMILY



ABOUT TEN remarkable species are included in the "scombridae" or mackerel family. Most of them are common to Florida waters. True mackerels include the tuna, which is the largest, as already described; and the long finned albacore, rarely found except in the Pacific Ocean; and the bonito. All three species are robust and somewhat similar in shape, differing principally in size and markings. Albacores average about twenty pounds, which is all the comment they shall receive.

Also included in this great group are the cravalle or jackfishes, the kingfish or cero, frigate, spotted cero, and the Spanish mackerel. All are fusiform shaped and may be distant relatives of the spearfishes.

Space precludes a complete description of all of these big-eyed, salt-water harlequins. The majority of them are green above, have dark-blue bars along the sides, silvery below. They are cosmopolites, carnivorous, feeding on crustacea and other small oceanic creatures—a swift, pelagic species. Because of the wide distribution—ranging from Canada to far below Florida in the Atlantic and along the California coast in the Pacific ocean, being abundant in temperate waters in many seas—and its high food value, the Spanish mackerel will be treated first. Appropriate comment will follow on the kingfish and bonito. The general characteristics of these will give a good idea of their hard fighting, attractive kin.



SPANISH MACKEREL

(*Scomberomorus maculatus*)

HABITAT, MIGRATION AND SPAWNING—This member covers an exceptionally large and wide range. Most of the year it inhabits the high seas. It is essentially a surface feeder. It comes from extreme southern waters in tremendously vast numbers, searching for food—shrimp, jellyfish, menhaden and other small fry—and to spawn. It travels offshore, all the way up the the Atlantic ocean from Brazil as far north as New England, in immense schools. Hundreds of excited, screaming sea birds, mostly gulls, fly overhead. Towards spring it comes close to shore to feed and spawn.

Dr. Holder writes that he "once ran through a school as far as the eye could reach". The author has encountered enormous multitudes, bunched up, like swarms of locusts do in air, the sea virtually teeming with the profuse legions, churning and boiling the waters, the riotous hordes, huddled together in overwhelming numbers for more than a nautical mile, two or three hundred yards wide. Their quivering, continuous, noisy movements were not limited to their native habitat, itself; a large number jumped several feet in air, probably evading larger, villainous deep-sea gamesters who caught many and consumed them before escape was possible. To observe them rising suddenly, gracefully and at full speed, unceasingly, is marvelous and thrilling.

On the edges of these great schools much sport is afforded by the use of the simplest kind of tackle—long bamboo poles. It is not unusual to see quite a few fishermen so engaged. "During the spring runs, tens of thousands of mackerel are taken by commercial as well as sports fishermen trolling from Sand Point to Bethel Shoals and beyond" advises the Vero Beach authorities.

In winter months large schools continue to arrive in the Florida Straits, along the Keys, and in the Gulf of Mexico on the West Coast, until spring. By mid-summer great numbers appear all along the Gulf Coast as far as Texas, and off the Carolina and Virginia coasts. During August, especially near Sandy Hook in the Chesapeake Bay, and during September in Palmico Sound around Portsmouth, they spawn (principally at night). The spawning continues in the warm waters farther north until the end of summer. Then, with the approach of cool weather they move out to open water and rapidly return south. By November the migration is completed. Once more they are far to the south whence they came originally.

GROWTH AND SIZE—The eggs of a single 6-pound mackerel are estimated to number one and one half millions. These if not consumed immediately by hungry fishes, hatch in a day or two. The young (5 to 7 months old, and 5 or 6 inches long) are designated "spikes" by commercial fishermen. Those approximately two years old (under 9 inches long) are called "tinkers." Those intermediate in size or age are called blinkers. After four years they are said to have reached maturity, the average being from one to three pounds, 15 to 18 inches long. Great quantities are taken in nets for market. Ten-pounders are not uncommon.

RECORD WEIGHTS—In the book, "American Food and Game Fishes" (by Jordan & Evermann, 1934), mention is made of a 25-pound specimen taken on rod and reel. This fish is said to have been caught in the Chesapeake Bay in 1901 and the record still holds.

A 31-pound Spanish mackerel is reported by Bishop & Sims, on their "1935 Map of Salt Water Game Fish of North America". Oddly enough this specimen, (which probably was not taken by usual angling methods) was caught at Amoy, China, by L. D. Harris, in 1928.

BODY AND COLOR—The bodies of all the mackerels are compact in shape and sturdily built. Each is provided with abundant energy and is swift and brilliant in action. They are covered with minute scales which are practically invisible to the naked eye. This gives them a skin of satin-like appearance, besides adding to their sleek, handsome appearance and attractiveness.

A distinguishing feature of all the genus is their pointed heads. The mouth opens wide, and is equipped with strong, sharp, cutting teeth, befitting this energetic, carnivorous, pelagic cosmopolite.

At its front the lateral line slants downward for a distance about one-third the length of the fish, and then continues evenly and prominently straight across its midcenter to the end of the body. Conspicuously adorning its back and sides are oval spots or bars almost evenly spaced, orange or bronze in color. The upper portion of the body is dark silvery-blue in some, bluish-green with a delicate pinkish blend, iridescent shade in others. Its sides are oceanic-green or grey-blue, and its belly is a bright silver.

When hooked these glowing colors first become intensified; then they disappear and reappear in rapid succession. After the fish is removed from the water the exquisite coloring fades rapidly.

The "cero" has a body similar to the Spanish mackerel, except that it is heavier than the latter, growing to a weight of 20 pounds (average about 6 pounds). Its distinguishing adornment consists of golden-hued bars, about one half inch in length, rounded at the edges and running parallel from front to rear along the sides.

FINS—Commencing about in a line with its pectoral and ventral fins, on the upper part of the body of the Spanish mackerel, is a first or spinal dorsal fin. It is inserted above the gill cover and supported by slender but strong rays which are depressible in a groove. It tapers to almost midway of the fish; then, after a brief interval it is followed by a somewhat high-rising second or soft dorsal fin which slants almost immediately to the body line. This short projection is about twice as high as its forerunner. These two fins are then followed by a series of detached rays or finlets which run to the end of the body. The tail or caudal fin is wide and strongly built, deeply cleft, its inner topography almost rounded to the shape of a quarter-moon. The anal fin is prominent; the ventral, small; and the pectoral fin is medium size.

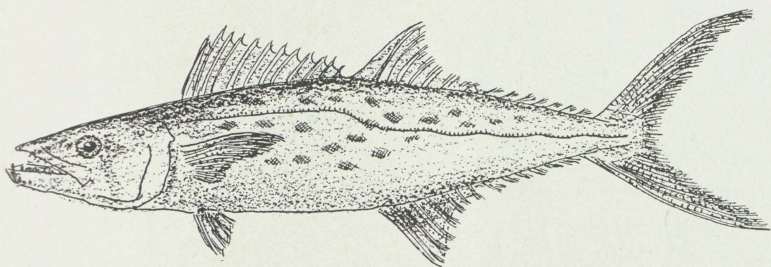
The fins are a lustrous black, set off with yellowish edges; and these with the curved tail enables the mackerel to cut through the sunlit waters like a luminous spectrum moving at tremendous speed.

GAME OR BATTLING QUALITIES—No member of the mackerel group lacks terrific, fighting ability. Few species exceed them in their relentless, swift, protracted and swimming actions. No fish gives a better or more thorough account of itself in game defiance. In utter fearlessness it leaps and clears the water with deadly aim and lands on top of a fastly trolled lure (either cut-bait, spoon or even a white handkerchief). On light tackle the mackerels are without a superior in the sport of game-fishing. They never seem willing to give up the struggle until their exhaustion is so complete they are unable to move a fin.

FOOD QUALITIES—Surrendering, at last, weary and worn, the trim, debonair mackerel is admiringly observed. Fresh from the water it is one of the sea's most beautiful creatures. Out of its native habitat it dies quickly and its perfectly colored body—blended gold and silver, blue and green, with tints of pink and brown hues and black and yellow-tipped fins—fades.

The Spanish mackerel is far famed in America and Europe for its excellent food value. The flesh is oily and may be either red or pink as well as white. Only the pompano has richer or sweeter flesh. What better disposition can be made of it, then, than to toss it with orthodox angler's rite to the waiting ship's chef. That willing individual cleans the fish expertly, places it on a dish which, in turn, is put into the "cooler". This procedure insures that its flesh will not touch the ice. In due time Mr. Mackerel adorns the hot spot of a frying pan. Its desires, even at this point in its career, to have a last swim are granted: drawn butter surrounds it until each flake is saturated with it.

As a final tribute, the author must remark that it is an "old Spanish mackerel custom" for him to be served, as above described, on June 4th of each year, his birthday anniversary. Then he waits patiently for another twelve month period to pass so that his epicurean desires can again be met in this manner.



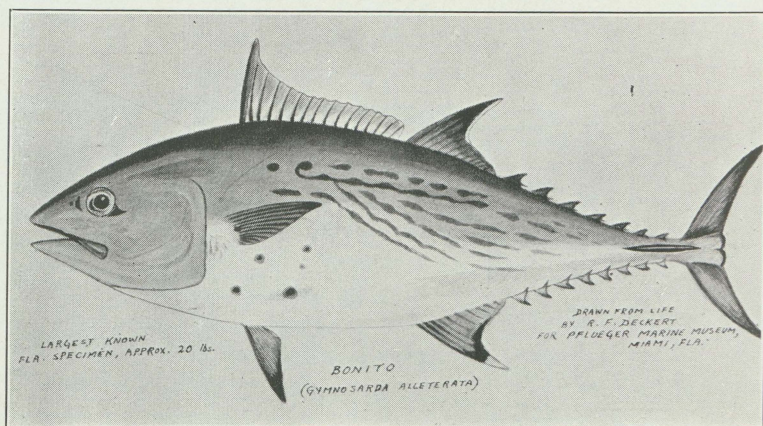
SPANISH MACKEREL
(1/5 average size)

BONITO

THE LATE Dr. Charles F. Holder, who has been previously mentioned as one of the world's greatest authorities on Florida game and reef fishes, writes of the robust and active bonito: "No description of word painting is adequate to describe its beauties. Whoever has read his comments on gamefishes is prepared for the endless variety of entertainment and rich sport encountered by devout anglers. Some of this is furnished by the lavishly gowned bonito, an important member of the distinguished mackerel tribe. Sailors call it 'skipjack'. Due to apparent mispronunciation of its name, sometimes it is 'bone-eater'".

The Florida or common bonito's scientific name is *gymnosarda alleterata*. The arctic or northern bonito is known professionally as the *sarda sarda*.

BUILD—The bonito is considered one of the most perfectly formed, symmetrical inhabitants of the Gulf Stream and adjacent waters. Its torso is firm but not as elongate as its near relatives; it widens and expands, almost seems swollen in the middle. The upper portion is a bright, metallic greyish-blue with alternating, dark, longitudinal or oblique streaks paralleling the sides about three fourths its length. Blendings of Nile green appear along the lower portion and offset its silvery,



satinlike finish. Olive, old gold and aqua hues of iridescent tints make it resplendent and imposing. Beneath its pectoral fins are very dark spots, usually black, which add to its attractiveness. The whole is muscular, smooth, well rounded and pleasant to look at.

His maker designed this swanky fish with a sharp, short head. It ends almost in a point. Radiant, colossal eyes bulge above the end of its mouth, which supports trenchant teeth, set in hard jaws.

The chunky bonito is no contender for the best in fish food for human beings. Its meat is deep maroon in color, somewhat coarse and lacks the tasteful qualities of the other mackerels. For the angler, however, the bonito serves a more noble purpose: strips thinly carved from his sides and belly make the choicest baits obtainable for sailfish (especially) and other "stream" and reef fishes. The lower sides and belly, more than a food in length, provide four desired baits, if skillfully carved. The firmness and light, silvery skin-color make them invaluable for this purpose.

FINS—This active, robust fish's hard-fighting abilities are attributed to its powerful fin equipment. In this respect it resembles the larger tunnies to which it is closely related. But the bonito differs from them in markings, and it is vastly smaller in size.

The large pectoral fins are paired. They extend on each side and are centrally located, just back of the gills—almost on a line with the firm mouth.

Commencing on top (nearly in line with the pectoral and ventral fins) is the high-rising, first spinous dorsal. It starts tapering down immediately and runs past the center—a distance of $\frac{1}{4}$ the full length of the fish. After a brief interval this is followed by a second, also high-rising, dorsal fin which projects itself slightly backwards; it also drops quickly towards the body line, being about half as long as its predecessor. Following the 2nd dorsal there arises, bonelike, cut of the upper back (about $\frac{3}{4}$ ths the way toward the rear) a series of 7 or 8 finlets which continue to the tail. These are so hard they resemble notches. A similar protruding series is located on the lower torso, behind the big anal fin. Perhaps it is from these "bony" rays that the bonito gets its name. (See illustration page 222).

Where these "bony" finlets commence the remaining $\frac{1}{4}$ of the torso narrows and becomes cylindrical or pipe shaped; and on both sides (just before the tail-extension) are paired, elongated tabs. Following this is joined one of the most powerful, sweeping, widely-curved tails in all fishdom. It is this massive, wide-spread caudal fin which furnishes the superior power and multiple strength he possesses. It furnishes him, also, sledgehammer force and enables him to charge like a frenzied cavalryman in the face of the enemy, and retreat hastily as it strips off as much line as it pleases.

TACKLE, HABITAT AND GAME QUALITIES—The reel should carry 250 yards of No. 12 or No. 15 thread line. It is advisable to allow bonito its freedom to run and dash about when it is hooked. A six ounce tip of bamboo, which has been recommended for other Gulf Stream game fishes, and 8/0 hook, with some ten or twelve feet of medium or light weight piano wire leader are desirable.

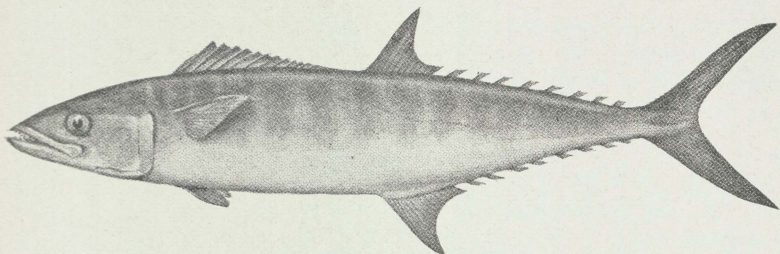
Striking hard almost any proffered lure, whether a strip of cut-bait or artificial spoon, feather-jig or plug, this gamester struggles furiously and untiringly at the end of the angler's line. In action it does not break water like some gamefishes; instead, it resorts to surprisingly long, fast rushes below the surface and it is almost impossible for the angler to know what fish has been tackled until it is brought alongside the craft.

Being somewhat cosmopolitan, the bonito frequents many waters. It is found along the entire Atlantic coast as far south as the Carribean sea, especially in the Gulf Stream. Occasional stragglers are picked up by anglers in the Gulf of Mexico on the West Coast. It comes inshore to feed and spawn.

The bonito is usually feeding, and at such times it is encountered principally in broad, trade wind regions of the ocean. During the spring months they are apt to mix with a school of their own or some other genera, such as the tuna.

Seldom does the Florida species weigh more than 15 pounds or grow longer than $2\frac{1}{2}$ feet. During the winter of 1935 a 19-pound bonito was caught in the Gulf Stream off Palm Beach by Mrs. C. A. Inglesby, of Savannah, Ga. A few months later, in April, 1936, one which exceeded this by a single pound was caught in the same current, eighteen miles north of Miami, off Hollywood, by Miss Alice Ijams of Terre Haute, Ind., fishing from Captain Banfield's yacht, *Luckie III*. Perhaps, this is the record for this species.

A half dozen bonito will wear out an enthusiastic deep-sea fisherman. They are "game" in the fullest sense of the word.



WAHOO OR PETO
(*acanthocybium solandri*)
(1/6 average size)

A sleek, high-ranking, spiny-finned piscatorial fascination on rod and reel. One of the famous mackerel (scombridae) family, its principal habitat is Florida and West Indies tropical waters. This scombroid fish satisfies the tackle and taste of the most fastidious deep-sea, sport fisherman. Its fine, dark-steel blue raiment fits over a plump, cylindrical, perfectly streamlined body. The devout angler who aptly said, "On angling jaunts the wahoo is a delicacy when boiled with egg sauce" expressed our sentiments fully.

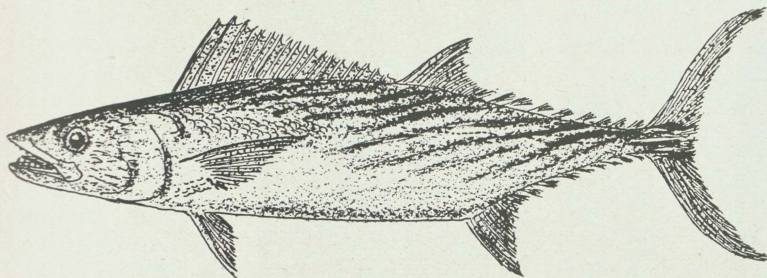
Captain T. C. Covell, of London, England, fishing from the private yacht Salu on March 11, 1936, offshore near Palm Beach, brought up a 69½-lb. wahoo. His catch was officially entered in the West Palm Beach Fishing Club's contest.

The American waters record —78 lbs.,—was made in 1929 by T. D. M. Cardeza at Key West.

W. E. Carlin hooked an 86-pounder while cruising in New Providence Channel around the British Bahamas in 1911.

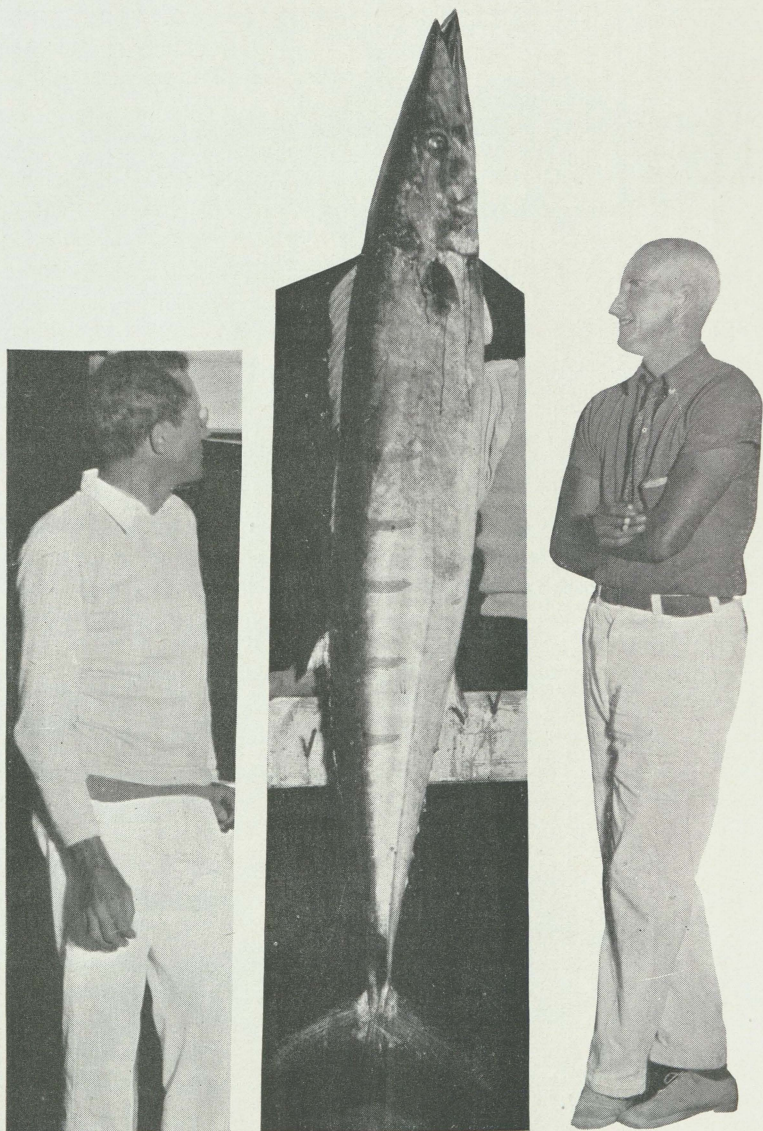
The world record, 124¾ lbs., 6-2/3 ft., was brought to gaff off Bird Island, Oahu, T. H., January, 1935, by J. B. Stickney. In Hawaii the wahoo is called "ono."

The author's first contact with a wahoo proved a bizarre encounter. After its dramatic strike, line aplenty vanished. Our efforts to check its phenomenal, speedy flight were in vain. For a time we thought it would be necessary to jerk the ocean out from under the pelagic gamester. Finally, after we buckled down to hard, tedious fishing effort the oceanic warrior was subdued. Its weight was estimated at less than 50 pounds (caught off Key Largo, in 1931).



ARCTIC (NORTHERN) BONITO
sarda sarda
(1/5 average size)

This is a somewhat different fish and it is rarer than the bonito *gymnosarda alleterata* common in tropical Florida waters.



THIS 67-LB. WAHOO was the world's record for the species on *light* tackle at the time it was caught (December 11, 1935). The angler, Jack Dunham of Miami, (left) used a No. 2½ reel, 5-oz. rod-tip and No. 6-thread Ashaway linen line. He was fishing with Guide-Captain L. O. Shubert on the *Serenade* two miles offshore at Miami Beach (near Government cut).

The wahoo is not abundant. It resembles the great kingfish. One of the chief differences between these two is that the wahoo has several dark, striped-blotches down its sides to the lateral line.

KINGFISH (CERO)



BECAUSE OF its dark, radiant silvery costume, the *scomberomorus cavalla* is the most sleek to look upon of the entire mackerel family.

BODY AND BUILD—The smooth, plump and glossy body of the Florida kingfish is almost perfect symmetry. It is constructed for great speed and endurance, although it lives but a few moments after being “boated”. Like the other members of this great genera its scales are so minute they cannot be seen with the naked eye. It has the appearance of velvety smoothness over all.

Except in the very young, no spots or other markings appear on the lustrous, steel-blue body other than a lilac or seagreen tint; even this fades into iridescent pink and coral.

Both upper and lower jaws are very extended, and set with numerous small but sharp, protruding teeth—from front to rear. The wedge-shaped head contains the characteristic large, glowing eyes found in nearly all big game fishes.

Like its cousins, the smaller mackerels, kingfish have an outstanding, distinctive lateral-line. This commences above and about the end of the large gill-covers. It runs back to nearly midway of the fish’s body, where it gradually “drops”; then it continues along the length of the fish, nearer its belly, in an uneven line, to the tail.

The forepart of the caudal fin follows the lateral line, paralleling it. It starts back of the gill-covers, being supported by high rays, diminishing in size as the center of the fish is approached. Where the first dorsal-fin ceases, a second top fin—a new portion—rises and almost immediately tapers down to the body, being triangular in form. At intervals thereafter, a series of little spinal rays “stick out” of the back as far as the end (tail) fin. Underneath the fish a similar series of these little spinal-rays appear, matching those on its top. Midway of the body, underneath, is a good sized anal (belly) fin, which precedes the little spinal rays. On the sides (just to the rear of the gill-covers) are a pair of large pectoral fins. Beneath them a single ventral fin ejects itself. The tail is wide, well-developed, and forms a crescent inside itself. This

whole development makes for masterly maneuvering and no deep-sea fish is its superior in this respect.

WEIGHT AND LENGTH—The usual length of the great kingfish is about three feet; some are smaller and a few larger than this.

The size of individual kingfish in a school does not vary much. In the Gulf waters offshore from St. Marks the "run" (which lasts about a month there, during April or May) has been especially observed by the author with respect to sizes. The weights during several seasons have varied but a few pounds each, although the maximum in difference of fish in some schools has been as much as eight pounds. As a rule the larger kingfishes seem to travel together, the smaller ones remaining to themselves, each with those of its own size. Commercial fishermen refer to this characteristic by saying that the kingfish are "running large" or "running small," as the case may be.

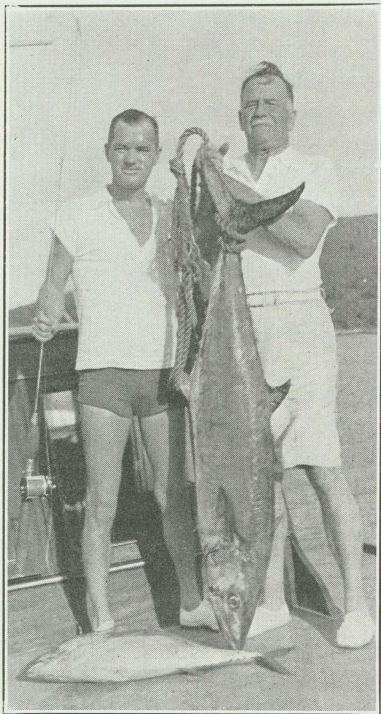
Their weight is from five to ten pounds generally, although many exceed twenty-five pounds and more. While fishing at Bola Funche, off the coast of Puerto Rico, the latter part of 1935, L. A. MacLeod, in company with General Blanton Winship, the island's governor, was rewarded with a 57 pound kingfish. It was five feet, one inch long and was handled on a steel casting rod 5-feet long.

In March, 1935, a new world's record was made when a sixty-two inch, 73½ pound Florida kingfish, 32 inches girth measurement, was hooked and boated by Lerner B. Harrison, in Bimini. His guide was Captain Bill Fagan, on the *Florida Cracker*. This specimen, mounted, is on display at the Pflueger Marine Museum, Miami.

HABITAT—Kingfish have many places of preference. In mid-winter they are found in deep oceanic stretches on the Florida East Coast and on reefs bordering the Gulf Stream; and through the Keys and in the Straits, as well as the West Coast's Gulf of Mexico. They are partial to cool, rough waters. About spring (March) the great migration starts. Tremendous schools—all bunched up, a half mile or more in length—come close to shore. Their immense numbers cause the waters to be churned up and this commotion draws the attention of sea-gulls who fly over them, making their peculiar noises.

All this brings their enemies to the vicinity of the schools. The big fish are tossed high in air or made to jump to escape the thing which is chasing them,—sharks, porpoises, barracuda, etc. At such times the sights are imposing and bewildering.

Hundreds of these large fish flip and toss themselves on the water's surface with the grace and poise of the birds overhead.



The 57-lb., 5-ft. 1-in. Great Kingfish, held by General Blanton Winship, Governor of Puerto Rico, (right) was taken on a 5-ft. steel casting rod off the Puerto Rican coast. The struggle continued for 3 hours. S. A. MacLeod, (left) the island's auditor, manipulated the tackle.

This weight was only one pound less than a kingfish caught in 1927 at Long Key by Miss Mae Haines.

Their traveling continues, in spite of diminishing numbers. A month later (April) they may be found hurrying north, some schools having been reported to be three miles in length as they head north along Florida's western coast, passing Clearwater, Tampa, making the bend and moving westward past St. Marks (near Tallahassee) on their way towards Texas. Commercial and sport fishermen deplete their ranks but, apparently, there are so many all this natural-enemy and manfishing toll is insignificant.

THE KINGFISH FLEET

—For those desirous of spending two or more days angling for Great Kingfish we offer a suggestion: Make inquiry of the fish-supply merchants "down the Keys" about January or February as to the whereabouts of the "kingfish fleet" (commercial fishermen). They will probably know just where the large school may be found.

Arrangements may be made, also, for a few sportsmen to get aboard the boats and partake of the actual work performed by these people who derive their living, or part of it, from this endeavor.

NO MAN'S LAND—There is a watery waste about forty miles west of Key West, near Marquesas key, in the Gulf of Mexico, known as "No Man's Land". At times this abyss is full with prime kingfish weighing up to thirty pounds. Commercial fishermen risk the elements and dangerous straits to assemble in large numbers at this choice place. The author has observed there every kind of craft from expensive yacht, boat, schooner, vessel, sail, and collier to mere floating barque, smack, bottom and lugger—anything that would float and carry one or more men, and hold a hundred pounds or more of these great kingfish. The total poundage taken from this one location, when the fleet's operation is at its height in January, is tremendous.

FIGHTING QUALITIES—For spectacular movements when after a moving bait, no fish that swims, with the possible exception of the dolphin, is its equal. Certainly few game fishes of its size are capable of a harder fight. Like a contortionist, they are mystifying, entertaining and spectacular, all at once. "Battle heroes, par excellence" is their well deserved rating in angling records.

This gamester "goes over the top" with a masterful hurdle that throws his shining bulk ten or more feet clear of the water. He even "walks on his ears". Above the surface he sluts and struts with such positiveness no kingfish enthusiast would refuse him the blue ribbon for performance. Rifle marksmen are not more expert in hitting their target than this "sure shot" is when a moving bright lure is sighted. Nothing in angling history outrivals—and few equal—the manifold thrills and state of excitement furnished by an eye-glistening kingfish running amuck when it vents its temper on a wiggling, teasing bait. That's what infects this water comedian, galvanizing and electrifying it into action. The angler is so inspired with solemn wonder and profound reverence he is immediately rendered temporarily inactive.

BAIT—Almost any shiny object—a metal fishing spoon, a squid, a white or light-colored rag; a bait cut from the white belly or side of another fish—lured (trolled, jerked, pulled or stirred intensely with rod and reel, by handline, or by the boat's drifting or rocking with an irregular motion) attracts and motivates this spectacular fish.

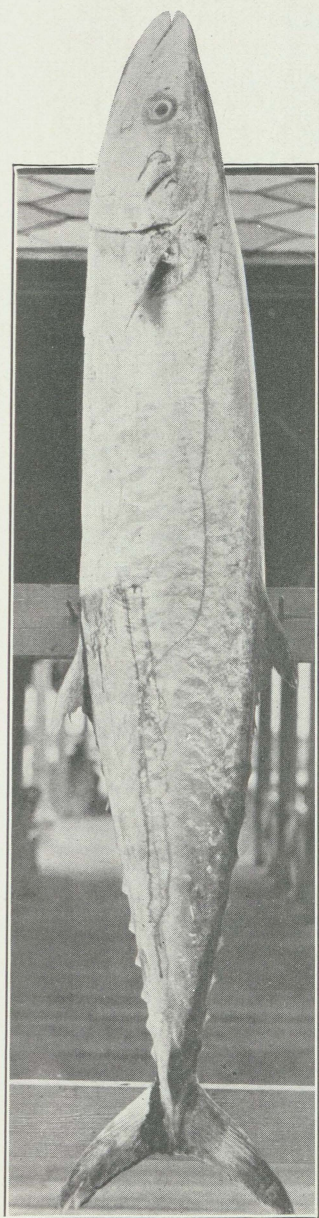
Nor do they lightly touch the bait. Upon sighting it, without delay this fellow smites it with a passionate and fanatical effect. The shock and misery of its prey lasts but a moment. The ungovernable temper of the kingfish causes him to crunch his shimmering little "catch" the moment his big lips touch it. Anything which moves and shines gets his immediate, acceptable attention. No quarter is asked, none is given!

The author has been rendered spellbound and lost in amazement by kingfish waltzing on their tails several dozen yards. Once one skipped or skimmed itself in a circle, stopping only when it bumped heads with another greedy one of its kind, whose admiration for the same lure was such as to make him dance along the surface more than 50 feet from an entirely different direction.

On a different occasion we have seen a wave cause a great kingfish to do the entirely unexpected: The bait was yanked high in air, and not daunted, this chap, who was making a bee-line for it, missed! A pair of human eyes started from their sockets when the companion sitting alongside us yelled and screamed as he brushed the offending intruder from his very lap. Words can't paint scenes like this; they must be experienced.

TACKLE—The maximum "play" of this species can only be had with light tackle; i.e., rod of wood, butt and tip overall not shorter than 6½ feet (tip at least 5-feet long and weighing about 6 ounces), and about 150 yards of 12-thread line. As we have explained elsewhere in this manuscript, the "tip" is that portion of the rod from the outer end to the point where same is assembled at the butt, with the tip fully seated in the butt. This, with a 7/0 hook is ample for taking the most foolhardy kingfish provided the tackle is deftly handled. It is anticipated that 75 feet or more of line will melt from the reel in the fish's initial dash, and more when it "sounds" (swims towards the bottom). "Light tension" is necessary, otherwise something will give way, either tip or line.

It is well to keep a lead-sinker or weight near the bait to make it drag several feet below the surface. Sometimes the big specimens will not come to the top readily and have to be enticed before they start on their breath-taking feats. There is no particular amount of "weight" recommended;



individual tastes and opinions will regulate this. "Chumming" bits of chopped-up fish, too, may be very effective to start the desired activities.

FOOD—Three great kingfish erected their own monuments in the memories of an equal number of deep-sea fishermen. We were in the midst of a school of them off Carysford Light, near Key Largo, one January. Apparently imagining themselves acrobats performing on a flying trapeze each of the kingfish trio made simultaneous, graceful leaps on our bait-targets. They "struck" with 100 percent results. The feat remains unduplicated in the world's fishing experiences.

Though without the desired facilities and trimmings for it, as soon as the astonished fishermen could recover their mental equilibrium the mate was requested to "broil them in butter sauce". Served in the form of delicious steaks, no food of king or priest ever proved so "sweet" or savory and enjoyable.

Under all and any circumstances this is the choicest food man ever ate, especially when chilled without allowing it to touch the ice.

GREAT KINGFISH (CERO)

Its almost perfect symmetry, distinctive lateral line, lustrous steel-blue silvery costume with lilac and seagreen tints makes it the most royal to look upon of the entire mackerel family. For spectacular movements when after a moving bait no fish that swims (except the dolphin) is its equal in thrilling action.

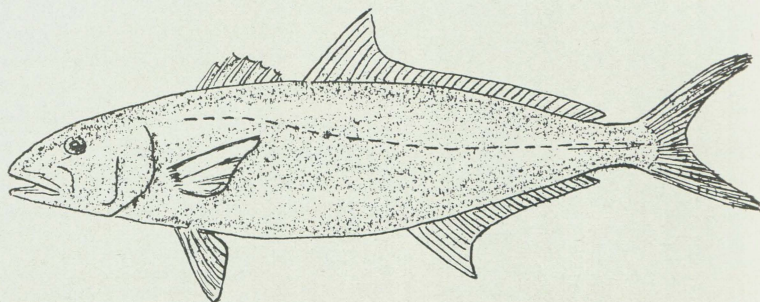
AMBERJACK



HIS GROWN-UP kinsman of the California great yellowtail, officially designated *seriola lalandi*, is a member of the cravalle-mackerel family. Like its cousin, the cravalle-jack (*caranx hippos*) it is one of the most overpowering adversaries of all game fishes.

SIZE AND RECORDS—The average length of these jacks is three feet. Rare specimens have been known which probably exceeded six feet. The majority will weigh twenty to thirty pounds. During the 2nd Annual Winter Fishing Contest (season 1935-36) the West Palm Beach Anglers Club awarded a prize to L. O. Beard of Lancaster, Pa., who brought in a 73½ pound amberjack. An 86 pound fish of this species was caught in 1935, off Bimini, by Mrs. W. H. Kirn. S. W. Eccles is said to have caught the largest amberjack on record—95 pounds—at Long Key, Florida, in 1916. Reference has been made to one of these fish seven feet long, reported to have weighed 134 pounds and said to have been caught off St. George, Bermuda, in January, 1928, by Thomas Bartram; and if it is established this will certainly be the all-time world's record.

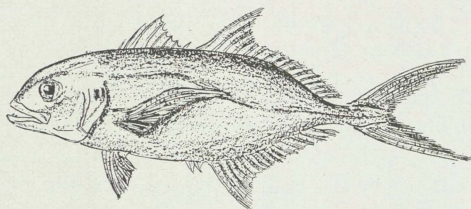
BUILD AND HABITAT—As his common designation, “amberjack”, indicates, the basic coloration of this fish is an olive brown, almost a glowing amber. Silvery grey, yellowish green and darker blends are intermixed along its sides. Out of the water its color immediately undergoes a change, be-



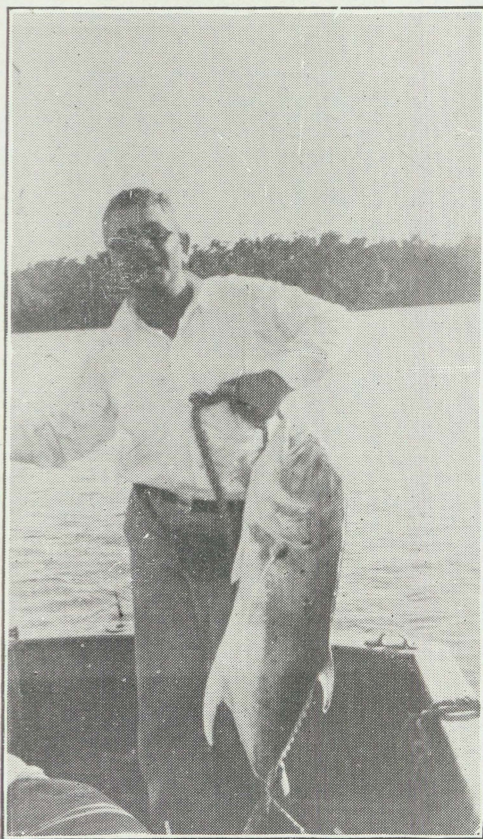
(1/6 average size)

GREAT AMBERJACK
(*seriola lalandi*)

Basic coloration is olive brown, almost a glowing amber. It is one of the gamest, most overpowering contestants on the entire Florida reef. Heavy tackle is recommended. Live bait is preferable, although this gamester strikes artificial lures and cut bait.



CRAVALLE JACK
(1/8 average size)



42-LB. CRAVALLE JACK
(World's Record)

This terrific fighter, the yellow-mackerel jack fish (*caranx hippos*) is unexcelled for exciting sport when engaged on light tackle. Its dazzling coloration is a golden-olive body. Rich tints of greyish-blue, purple or green appear on its sides. Across its gill covers is an ebony blemish which distinguishes it from the pompano (to which it bears close resemblance).

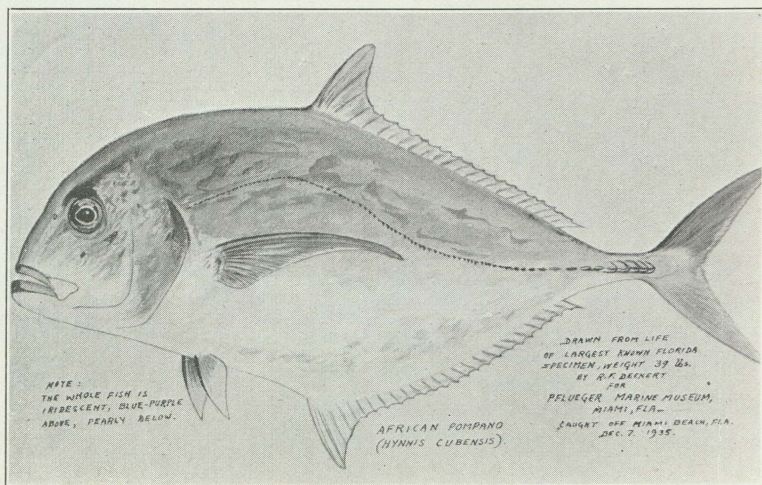
Except for a small patch of center scales at its breast, this fish is covered with minute scales.

The fins are elevated and projecting. The dorsal fin has about 20 and the anal about 16 or 17 soft, supporting rays. Its mouth is comparatively small. The eyes are big and glowing, giving it the nickname "horse-eye" jack. The tail is widely forked, strong, and follows a hard, bony extension.

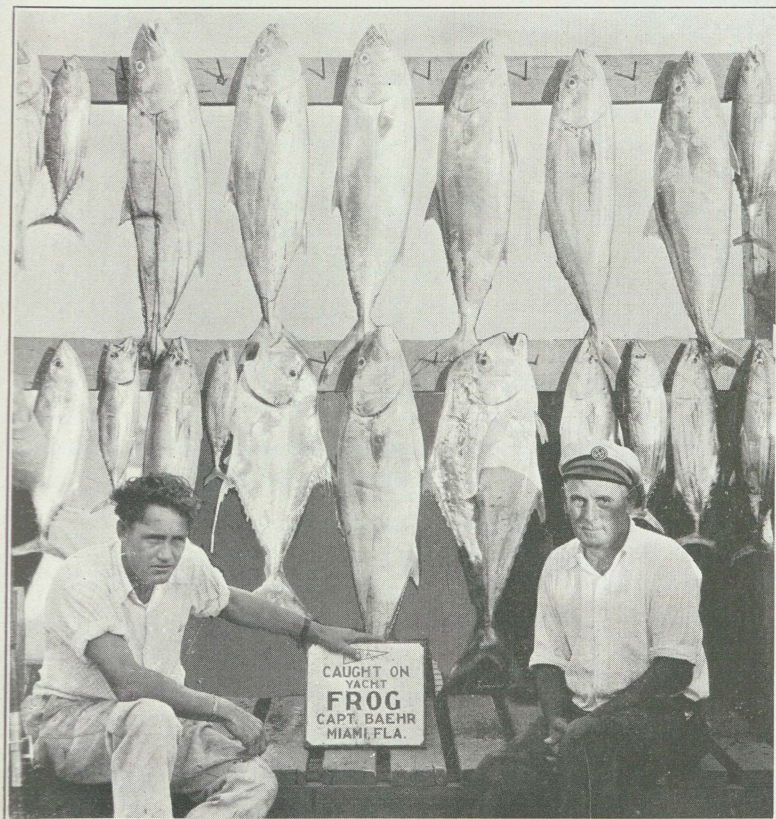
This species seldom is taken over ten pounds. Bishop & Sims show the record of this species on their 1935 Big Gamefish map-chart as 24¾ lbs. The picture (here shown) is of the cravalle jack caught by the author in June, 1931, in the Ten Thousand Island waters. (Gregory Lopez, guide). It weighed 42 lbs., being the world's record for this species.

coming a brilliant blue iridescence; finally the fish becomes a dull, muddy brown. At its belly these tints fade into a milky white. The fins lose their deep orange lustre, too.

Amberjack fins are old-gold or dark-yellow. The 2nd or main dorsal fin has thirty to thirty-four rays supporting it. It starts midway on the fish's top or back and continues almost to the tail. Its forepart is about twice as high as the rear portion. A somewhat smaller fin portion precedes the principal dorsal, projecting itself for a short distance higher than the remainder; then it drops off or tapers quickly until it is only an inch or two high. The pectoral fin, which is just behind the gill covers, is fairly large and powerful. This is also true of the ventral fin. About two-thirds back, along or underneath the bodyline, is located the anal fin, being much larger at the beginning and it tapers in its remaining portion until it almost reaches the tail, like the dorsal fin, with which it is paired. The tail is a heavily built, webbed affair, wide and forked, loaded with tremendous energy and power, bright yellow at the end.



AFRICAN POMPANO



AL PFLUEGER (left) is one of the world's most noted authoritative experts on tropical and gamefish species. Many years have been spent by him in patient research studying live specimens in their native habitats and catches brought in to be mounted. Because of the untiring, skilled efforts on the part of him and other artisans the science of fish-taxidermy has been developed into a fine art.

The Pflueger Marine Museum of Miami (admission free to the public) contains mounted specimens of numerous fishes. Some are rare species, others were world's records when taken.

Blessed with a charming personality, he is naturally a devout angler and a thoroughbred sportsman. On the rack are big amberjacks he caught in a day's fishing in the Florida keys. To the left and right of the amberjack in the center are African pompanos.

It frequent open bays, cuts, inlets and other arms of the sea. Most of these lusty fish-troopers are found awaiting us for battle in deep water or over tropical gardens adjoining rocky reefs.

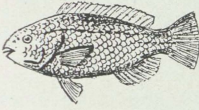
Notwithstanding its great bulk, this plump fish is exceptionally well proportioned, solidly built; flesh well distributed, and its husky, forceful contour easy and natural. It is radiant and rich looking, besides having qualities of strength and untiring fighting ability. Amberjacks bow to no rival, either in gymnastic feats or ability to tax human energy to the limit. Tremendously large, invincible eyes are set advantageously in a brawny, well developed, sharply tapered forehead. Its powerful lower jaw is indicative of its tenacity and brute force.

BAIT—Amberjacks are omnivorous feeders. They exist principally upon shrimp, crustacea, mullet and other small fishes. Therefore, *live* bait is preferable. However, they will strike almost any kind of lure, whether it be cut bait or artificial (feather-jigs, plugs, spoons, etc.).

TACKLE AND FIGHTING QUALITIES—All the fish tricks and strategy of battle science are known and brought to play by the ferocious amberjack. This, combined with their mule-like strength and bulldog tenacity, takes its toll in bait and tackle. Once aroused to action they do not hesitate to grab a little, frightened fish even no more than a few feet from the boat. To withstand their strong jerks and sudden dives, to lift them, or to start the beastly sea-dwellers toward the surface again, after frantic but unwearied bounds and capers, at least a twelve ounce bamboo rod tip, six feet long, with about 250 yards of eighteen thread cuttyhunk linen line is highly desirable. The leader wire should be stout, to stand the strain of excessive twisting.

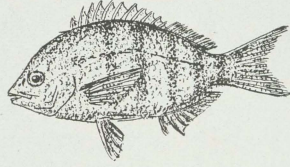
First, amberjack must be "teased up." This is accomplished by casting chunks of fish (the size of a pack of cigarettes or smaller) overboard in the immediate vicinity while the craft drifts shoreward with the incoming tide. When water is clear, in but a few minutes we observe a couple of immense fish bodies tearing after the chum. Mullet (cut up), shrimp, crabs, sardines or any other similar enticement tossed out, will work wonders and have a similar effect.

SMALL FISHES FOR LIVE BAIT



PARROT FISH
(1/12 average size)

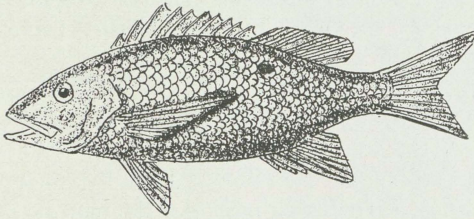
So-called because of its very beautiful, brilliant coloration. They are several in kind, most prominent being the green and the red parrot-fishes. Amber-jacks find them especially attractive when used as live bait. Some are about 12 inches long and weigh as much as 2 pounds.



SAILORS CHOICE
(1/4 average size)

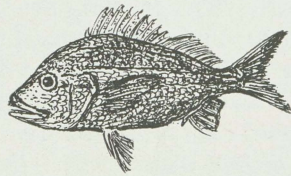
Similar to other grunts except that a series of stripes appear on its body, running from top to bottom.

The larger grunts make excellent food as pan-fish.



MUTTON SNAPPER
(1/5 average size)

Strikingly colored dark-rosy red and olivaceous, with small dark spots on the side, fins a crimson red. Some, 2 feet in length, weigh up to 20 pounds. The smaller muttonfishes are most acceptable as bait for amberjacks. The species are caught stillfishing, principally.



GRUNTS
(1/5 average size)

Designated white, yellow, grey or striped, and French (open-mouth) from their coloration; they belong to the snapper family. Countless thousands dart about in the clear waters along the coasts and keys. Caught with small hooks and handlines, when removed from the water they make a grunting noise. From this sound they derive their name.

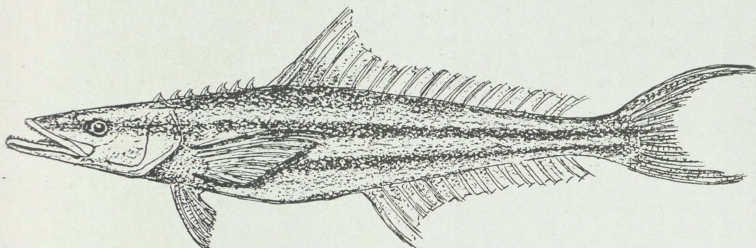
Then, while this process is under way, a live bait is hooked in the back, just above its spinal column. This does not injure the little six to ten inch fishlet much, and the bait is placed gently overboard. Some forty to fifty feet of line are "freed" from the reel and the live bait is permitted to swim along behind our drifting boat.

Experienced anglers agree that pound for pound the amberjack is the most unyielding fighter on the shore side of the "Stream". He is stubborn and positively refuses to be stopped. Too much interference with his movements frequently results in a good line or rod-tip becoming a casualty before the encounter gets well under way. The spry, fleeting maniac in fish's garb taxes man's strength to the utmost from the moment he gobbles up the live bait and finds a force restraining his movements. This master strategist causes so much continuous commotion when hooked that his kin and neighbors quickly come up to see what is causing the trouble. Therefore, it is a splendid practice to keep one of these fish tied behind the boat, at the surface. In the absence of this, the entire school may become frightened and leave; once they "sound" no amount of effort will bring them to the top again for hours. All during the combat they make as striking impression on the angler as on the live bait. Game to the last, they struggle continuously. After they are put into the fish box on deck they flop around and knock their bodies against the sides, even "kicking" the lid off the big box until death exhausts their activities.

Since amberjacks are not valuable for either food or bait it is the author's custom to release them after a single one is "hung out" to entice others to the scene.

About forty miles below hurricane wrecked Long Key is Sombrero reef. In January, 1933, in company with the late "Baron Commodore" Uncle Will Newman, of Richmond, Va., and Judge Herman Goldstein, of Griffin, Ga., (the peer of all deep-sea anglers in technique) we first stopped at Coffin Patch, a short distance before Sombero. In less than an hour, with handlines and small hooks, we had an assortment of mariposes—parrot fish, angelfish, sailor's choice, grunts, yellowtail, etc.—all being most excellent bait. Amberjacks do not chew; they merely crush and gulp their prey.

In a few hours these spectacular tackle destroyers had given us all the activity we collectively craved. The author had the satisfaction of telling our guide we had run the gauntlet with these relentless inhabitants of the lower keys.



COBIA (CRAB EATER)

(*rachycentron canadus*)

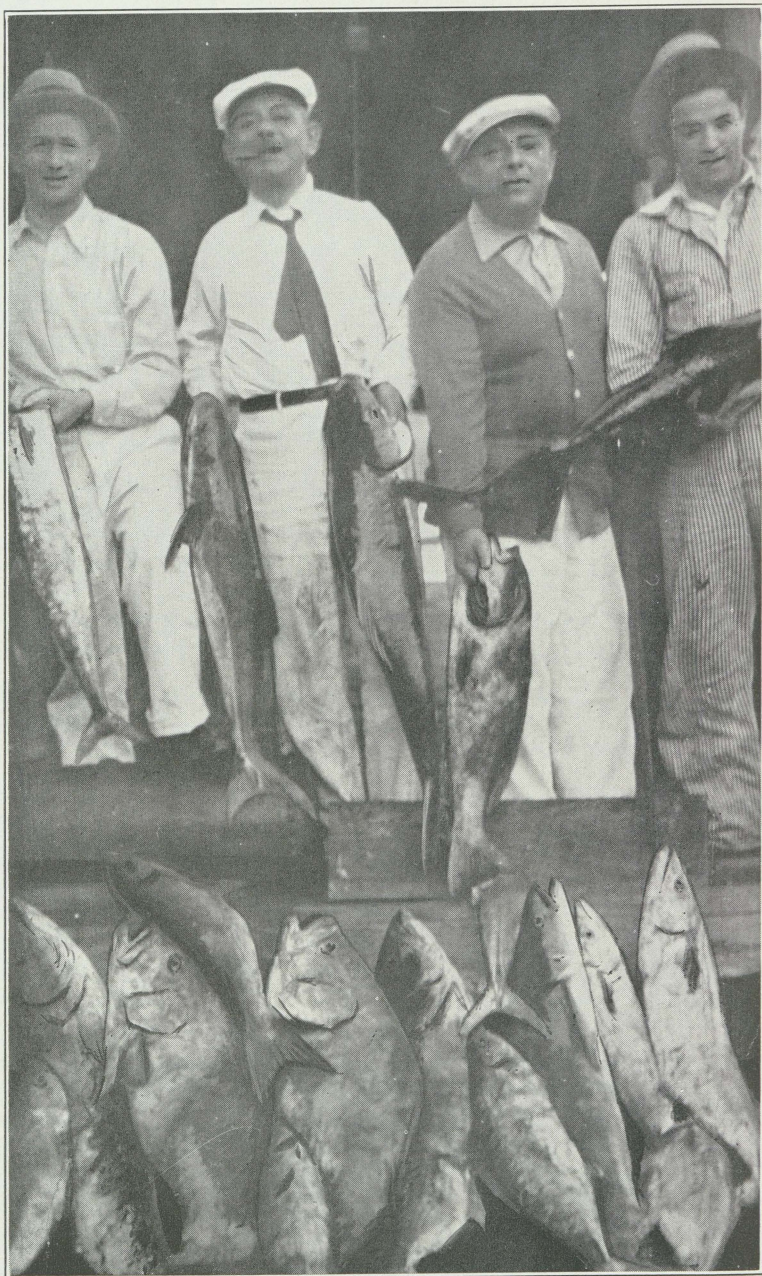
(1/6 average size)

This distinctive, gluttonous, warm-seas wanderer is a member of the sergeantfish family. Although inhabiting many places in the world's tropical waters it is not abundant in any particular locality.

Along the eastern part of the Gulf coast's shoreline, where it appears frequently during summer months, the residents in the vicinity of Panama City, St. Marks and other Apalachee Bay points refer to it as the "black salmon". In some regions it is called crab eater, carbio or cabbio. Louisiana fishermen know it as the "lemon fish" or ling. (It is not a ling—true lings are members of the cod family.) On the Atlantic coast it is the "black bonito".

Its body is a copperish-brown shade, the sides and beneath being paler brown. "Its dark, almost black lateral band is wider than the eye; it extends from the snout to the base of the caudal fin, resembling the stripes on military trousers. This probably accounts for the designation sergeantfish," advises an authority. On top a series of bony finlets or abortive fins rise above the gill covers and continue about 1/5 the full length of the cobia to its posterior or high-rising, peaked dorsal fin.

It is cursed with an insatiable appetite, causing it to continuously devour practically any small marine life that can be overtaken. Note the long head and distended stomach! It moves along the entire Atlantic and Gulf coasts, feeding principally on crabs, shrimp, menhaden and small fishes. Often cobia are taken in schools of kingfish, and frequently in arms of the sea, oceanic inlets, passes, channels and bays. The author

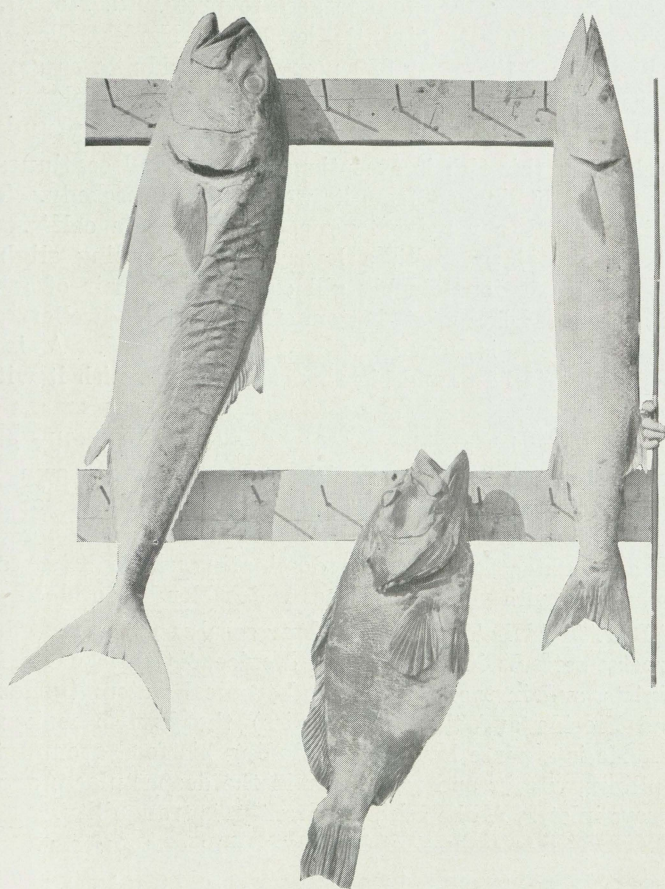


At St. Marks the kingfish "run" continues about a month in April or May. During spring and summer speckled sea trout are abundant. The vivacious tarpon may be caught in nearby channels in June, July and August. Redfish congregate in the St. Marks river in cold months. Groupers, snappers and other bottom fish are taken nearly all months of the year.

Sam Rosenberg (left) holds a kingfish; next, the author exhibits a cobia in each hand; third, Sam Baum has picked up a grouper; and (right) Louis Straus displays a cobia. In the foreground are kingfish and groupers.

has determined the presence of and caused cobia to strike by chumming pieces of bread or chopped-fish into school of king-fish; when present this brings them up in a hurry. On light tackle this gamefish puts up a brave defense.

A 4 3/4-ft. long, 60-lb. cobia was taken as far north as Woods Hole, Mass. The record is 82-lbs., caught in 1930, off Long Key, by E. P. Coles. They average about 15-lbs. weight and 2 1/2 feet long. Specimens of 5-ft. length, weigh about 50 lbs.



A Great Amberjack keeps company with a Snapper and a Barracuda
—on the fish rack.

JEWFISH



THIS IS another stubby, corpulent appearing fish. Sometimes it is known as the "guasa" or "mero de lo alto". The most common term, by which it is usually called, is "jewfish" (because it's hide is tough and it is hard to skin). Scientists call it the *promicrops itaiara*.

BUILD AND SIZE—Apparently unable to wander much, this thick skinned fish is commodious, but somewhat clumsy. Jewfish are related to the groupers. The young weigh fifteen or twenty pounds. As this volume goes to press, Ed. McGill, of Atlanta, pulled in two gigantic jewfish at Naples, Fla., one weighed 407 and the other 320 pounds. An adult was caught in 1925 north of Miami, three miles from Bakers Haulover, by Richard Tallman, which weighed approximately 750 pounds.

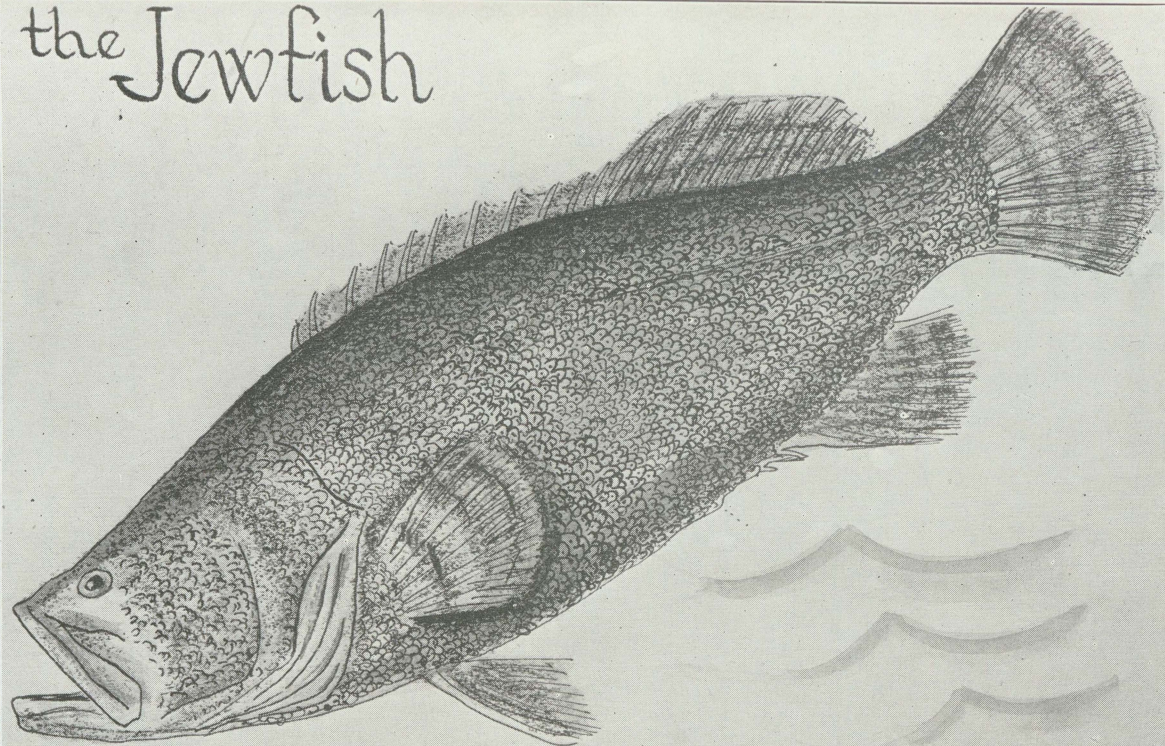
The head of this fish is exceptionally large and continues in almost a straight line out from its well rounded forebody. This is equipped with a massive tongue, like that of a calf's. Its mouth is extra large, with a lower jaw protruding slightly. Above the proportionately big gill covers are a pair of great, peering eyes. Like most bottom feeders and dwellers the caudal (tail) fin is heavily webbed and rounded. A large, wide-spread dorsal fin, and big fins elsewhere, furnish it with a bulky appearance.

COLOR—Jewfish are decorated with prominent bodily spots or bars. The adult is a greenish yellow, almost brown and its body grows to several feet long. Dark cross bands of contrasting orange and black adorn its huge sides. Young jewfishes are lighter in color, the dominating shade being olive brown, tinted with yellow splotches which blend into black.

HABITAT AND TACKLE—Along coral reefs, in mud holes and rocky bottoms in the Gulf of Mexico, Atlantic coast bays and inlets, and in the Bahamas and tropical waters (generally around Florida and the West Indies) the jewfish makes his home. He is a peace loving fish, finding his food around trestles, pilings, wrecks and remaining in the deeper places around mangrove inlets. All he asks, apparently, is tranquility.

One method of angling for this fish will make it fair sport. The craft is maneuvered to a point where the depth is 25 to 50 feet. The bottom should be rocky or have wrecks or pilings close by. The boat is allowed to drift, or it is trolled slowly

the Jewfish



Thick headed, big-mouthed, heavy-tongued, closely allied to the grouper family, the portly jewfish is said to derive its name from the fact that it is "hard to skin", also because its build is corpulent. Prominent brown spots appear on its smooth-skinned, greenish-yellow body. Its heavily-webbed, rounded caudal (tail) fin indicates it is a bottom feeder. Some of this species grow much larger than 500 pounds. A sluggish disposition detracts from its game qualities except for an initial, hasty dash to its crevice-hole or under a rock.

—very slowly—over the selected points; or, if the tide is not running, good results can be had stillfishing.

A chunk of fish, about 3-inches long and an inch thick, is so affixed to the hook that the barb is outside and resting against the bait. This is cast overboard, easily. Enough line is let out to permit it to *nearly* touch the bottom, with an additional few feet of line loosed and coiled or laid on the side of the boat.

The rod should be heavy enough to withstand reasonable punishment, say 9 to 12 ounces tip-weight. About 250 or 300 feet of No. 15 or No. 18 thread linen line, attached to a fairly heavy, 6 or 8-ft. leader wire, with the usual swivels connecting line and leader-wire, is required.

A little patience is now called for. If we could peer beneath the surface we would notice this shrewd marine-creature does not immediately come out of his "hole". He sees the desired food-morsel, keeps his eye on it, but not until the lapse of a few minutes or half an hour does he advance towards it. Then, cautiously, he nibbles and finally accepts it whole. Immediately he moves off with it hurriedly, and the line disappears, faster and faster. Up to this time he has had a "free spool", but now the rod is held taut, the tension is tightened and the line is allowed to come taut with the rod. Then "strike" hard!

In most instances, at the very beginning, realizing that all is not well, Mr. Jewfish will run to cover. For this reason it does not furnish the thrilling action of less bulky gamefishes. Instead of becoming panicky and running all over the watery creation, the jewfish uses common-sense shrewdness. The dash to his hole or rock is made with a surprising rush. Then, with stubbornness, he remains there. He keeps the line below for indefinite periods. An angler without patience will finally, in desperation, cut off part of the line or mutter foul oaths at the utter indifference of this recluse while jerking and pulling, but instead of getting his prey "loose" he may lose his catch as well as part of the tackle. It is necessary, in such cases, to wait on the pleasure of the fish to make the next move.

Those experienced with his tactics are willing to wait as much as an hour or more to take their victim,—the moment he emerges from his hiding place. Having a fine line cut on coral rock teaches one to be alert but not hasty.

When a live yellowtail, grunt, sailor's choice or other small reef-fish is available for bait, the sport does not lack action. Before the lure is allowed to reach the bottom the line will fairly "zoom" with the steady pull of the fish, and a hundred feet move off the reel before the fisherman realizes it. No more steady defiance is offered by any bulky species on such occasions. He must be kept off the bottom, and if not too strong tension is put on, will fight hard not to be brought to the surface. If your guide is alert he will move the boat in various directions, away from the rocky area, while the tugs on the line keeps you informed of the struggle. Reeling carefully and steadily will bring the bulky mass up, after which it quickly surrenders.

FOOD QUALITIES—In Cuba jewfish steaks are considered a delicacy. Our only experience with its meat was in the form of chowder, a yearling being the principle item in the pot. Our larger catches of this species are released promptly.

GROUPER



AVING WIDE distribution on nearly all bottoms, it is always possible to take a plentiful number of the "banded sea-perch" known as grouper. Some kinds are called rockhind or speckled hind. They are a serranoid sea bass, with large, heavily rounded bodies. It is not as elongate as gamefishes nor is it as "chunky" as the jewfish—which it somewhat resembles. Groupers have tremendously large heads, extremely big mouths with thick lips opening very wide, and enormous, protruding eyes.

COLORING—These fishes have the ability to change color swiftly. They have been referred to as "chameleons of the sea" because of this characteristic. Townsend (1929) reports that the red grouper assumes at least eight different colorations in the course of a day. Some groupers are chocolate brown, mottled with mixed beige, rust and rose splotches. Others—like the Nassau grouper—are handsomely striped. Many bodies are contrastingly flushed with golden, tan and Chile-brown bars. This coloration ability adds much to the singular appearance of this species. Those with highly colored yellow or red fins are distinguished by being designated yellow fin or red-fin groupers, respectively. These two latter frequent edges of reefs and deeper waters. The scales, if any exist, are so minute as not to be noticeable. To all appearances their outer skins are smooth and lustrous.

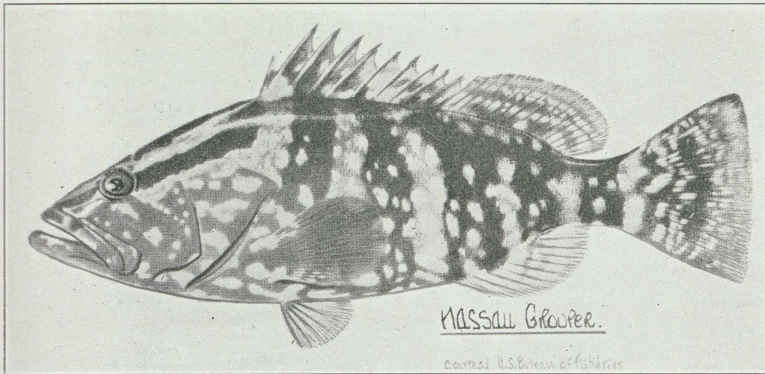
SIZE—They range in size from two to several hundred pounds. On the Great Barrier Reef near Queensland, Australia, giant groupers weighing 750 pounds were found by George Vanderbilt, the 21-year old New York explorer and piscatologist on his fish-collecting expedition for the Philadelphia Academy of Natural Sciences.

It cannot be said that any of this family come within the strict classification of the sportier game fishes. As a rule groupers are picked up while stillfishing or trolling for other game species. They take most of the baits offered, whether the lure is live or artificial or cut-bait. Any tackle is suitable for them inasmuch as they are almost devoid of fight after an initial run or two, unless in deeper water and on such light tension that they can "play" without being drowned.

HABITAT—This highly decorated, omniverous biter is found in Florida and West Indies waters principally, although they are numerous in the Gulf of Mexico along the West Coast. They live in undersea crevices, principally around rocks, coral reefs, mud bottoms and other bottoms.

Groupers feed on mullet, baloa, grunts and other small fishes, as well as crabs, shrimp and crustacea. They strike practically any kind of cut or artificial bait.

The small ones, up to a few pounds in weight, are important food fishes. Inasmuch as groupers are not gamefishes within the scope of this volume, very little attention is paid them in this treatise. It is interesting to note, however, that the liver of the red grouper (*epinephelus morio*) furnishes an oil which has a distinct medicinal value: it is used to blend Mead's Oleum percomorphum (a) to fortify cod liver oil—giving it a potency 10 times that of cod liver oil of pharmacopeia definition in both vitamins A and D; and (b) as a separate therapeutic remedy, which has 100 times the potency of pharmacopeial cod liver oil.



($\frac{1}{4}$ average size)

ROBALO (SNOOK)

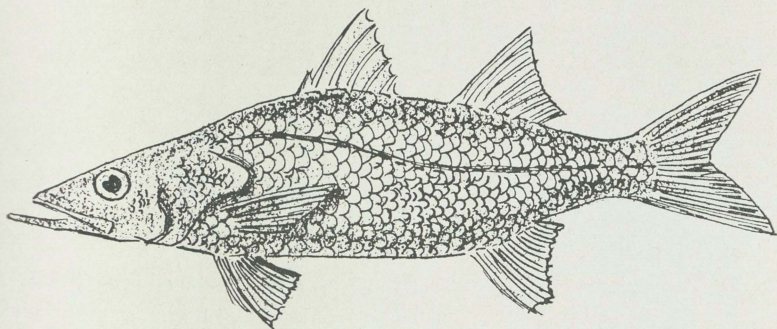


UP TO TWO or three years ago it was possible for anyone to take as many hundred pounds of the robalo or sergeant fish as were desired in the brackish, backwater channels on the southwestern Florida coast. Even today thousands of these fish are removed weekly from the waters around the Ten Thousand Islands. This unsportsmanlike attitude on the part of both guide and angler coupled with commercial fishermen's toll of snook is causing this species to become less and less plentiful. If these practices continue it will deplete the supply. The same may be said of some other game fishes. Those interested should protest to state officials and urge protective legislation.

Snook inhabit protected, brackish waters of creeks, canals and channels around mangrove keys, being found principally at the edges of these little islands, also near bridges, jetties and in the trail-canals. Scientifically it is *centropomous undecemalis*.

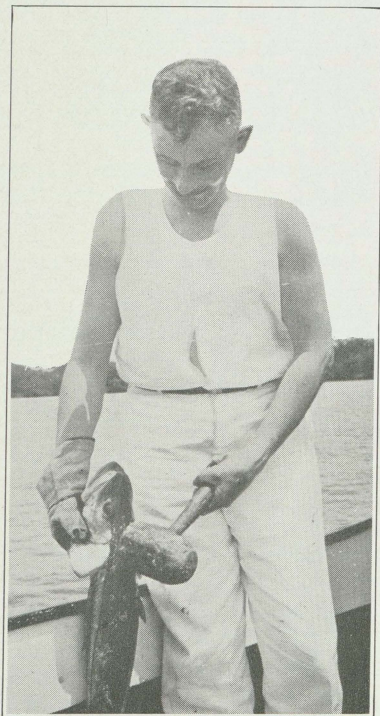
BODY—The snook is shaped like a pike or barracuda in some respects. Its body is elongate, covered with small scales perhaps a half-inch in diameter, and thoroughly lubricated with a slimy secretion. The head is fitted with long, gristly jaws, the lower protruding to some extent. Firey, staring, jet black eyes reveal its gamey traits of character. Two prominently located back or dorsal fins adorn this fish's well rounded body. They are a miracle of disguising coloration, the sides being a dark grey and having slight tints of green. The slightest sensation in the water registers in its prominent lateral line (nerve center), which commences above the top of the gill cover and runs along the sides of its body. Its tail is strongly constructed, weblike and half rounded, half forked—an appropriately large organ to instantly move its big body.

SIZE—Snook attain weights in excess of thirty pounds. They grow five to six feet in length. Miss Thelma Johnson, of West Palm Beach, successfully tackled a 32-pound snook during the fishing contest held there in the summer of 1935. Of course these dimensions are not usual; the average of this genera vary from two or three to fifteen pounds in weight, the larger of them measuring two or three feet in length. The largest snook on record weighed 49½ pounds. It was caught June 11, 1926, off Coon Key, near Marco, in the Ten Thousand Islands. L. S. Caine, of Orlando, Fla., in-

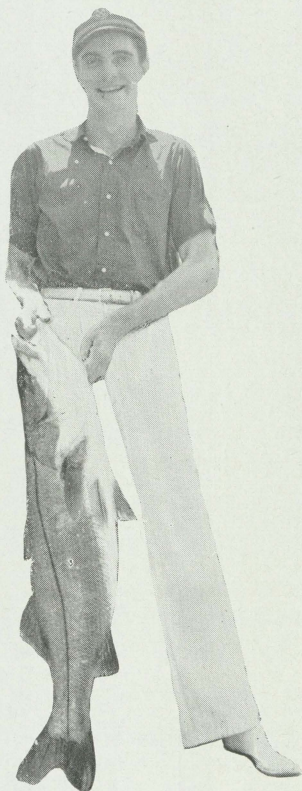


SNOOK (ROBALO)
(*centropomous undecemalis*)
(1/5 average size)

SNOOK (robalo) make their homes and are most numerous in the multitudinous, mangrove-key lagoons, creeks and river-channels of the Ten Thousand Islands.



The effectiveness of the "persuader" is demonstrated: one resounding wallop on its gristly head lulls "snookie" into an untroubled, permanent sleep.



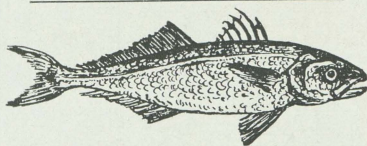
PROOF OF LIVE BAIT'S EFFECTIVENESS

SNOOK (ROBALO)

Length 43½ inches—Weight 31 pounds.
Richard Gardner of Miami is known as
a dyed-in-the-wool snook angler.

Late one April night (1936) he was enjoying the cooling fragrance of the perpetual breezes on the county causeway viaduct connecting Miami with Miami Beach. So that his "time would not be idly spent" he permitted a live mullet bait to twist and turn at the end of his fishing line in Biscayne Bay during dead, low tide. Faster than a shot, hot upon its trail appeared this strong, determined snook enemy. With terrific force it swooped upon and closed its gristly jaws around the stampeded mullet "before the little fellow could pray". Like all sergeant fish this frenzied tackler did not shirk his job, but all its undenied endurance and initiative failed to disgorge the hook.

"Dick" says his entire family feasted on the victim.



BLUEFISH (BLUERUNNER) (*pomatomus saltatrix*)

(1/6 average size)

Sometimes called skipjack, or snapper when young, this very active, greedy oceanic gamefish is widely distributed in many seas. They are plentiful on the Atlantic Coast the entire distance from Massachusetts to Brazil. Bluerunner's scales are fine but rough. They are energetic, voracious and destructive of very small fishes, which accounts for their sportiness on light tackle. These fish grow rapidly, although the adult's average weight is but a few pounds. The larger specimens are found considerably offshore. Excellent food fish; flesh has rich flavor.

A 25-lb. bluefish was caught in 1874 by L. Hathaway with rod and reel off Cohasset, Mass. The largest on record is a 27-pounder, taken by Nelson P. Emer at Nantucket in 1906.

Schools of these fish are sometimes found on the seacoast at Palm Beach, furnishing splendid opportunities for surf casting and still fishing from the pier at that point.

forms the author that this prize "inhaled" a bait intended for tarpon and so met its doom. Mrs. Claus Senghaus, co-manager of the Rod & Gun Club and the Inn, at Everglades, near where most snook are caught, states that one weighing thirty-three pounds was taken in the Ten Thousand Islands, in 1933. Gregory Lopez, one of the best informed and most reliable fishing guides in that region, informs us that Zane Grey captured a snook some years ago in Shark river which weighed 42 pounds.

HABITAT AND TACKLE—The snook makes its home in protected, brackish waters, principally in creeks, tributaries and rivers, canals and similar places. Their almost uniform coloration blends exceedingly well with such waters.

It is a crafty and subtle fish. For hours it lies quietly along a mangrove-island channel, its impetuous body almost concealed. Suddenly it darts offside at a small, unwary fishlet and engulfs the victim instantly.

When hooked by an angler it leaps with fury, exposing a long, large head of gristle and part of the plump bodily form above the surface. Simultaneously the great fish's head shakes violently in the savage attempt to rid itself of the tormenting hook. The superb fighting spirit exhibited by this fish indicates that it is as determined to be victorious in battle as is the angler, all of which contributes to the fast and furious action.

"Snook" understands its business thoroughly and is prepared to entertain sportsmen who contact it if the fish is given an even break by the use of light tackle. A light rod, the tip of which is 4 or 5 ounces, is sufficiently heavy; a reel with No. 9-thread line (about 250 feet) and a No. 2 Drone spoon usually are used. This equipment will furnish a better "play" than any other tackle and is inexpensive. For bait, if the "spoon" is not available, use a plug or cut-bait. Live fingerlings, fry, insects, flies and fiddler crabs all are acceptable. Snooks can be taken either drifting, still-fishing or trolling—all provide excellent results.

FOOD VALUE—Although of only fairly good food quality, thousands of pounds are sold monthly to restaurants which serve them as trout. This is probably the primary reason for their being thrown in the fishbox aboard instead of being released after furnishing the desired sport. This situation, if not remedied, will be regretted by the skipper-captains, as well as commercial fishermen, in time to come.

REDFISH (CHANNEL BASS)



ONE OF THE most popular of the smaller game fishes is known in various localities by different names, such as redbfish, channel bass, red drum, reef bass and perhaps others, (e.g., branded drum from the conspicuous dark spots at the base of the caudal fin.) Curators call it *sciaenops ocellatus*.

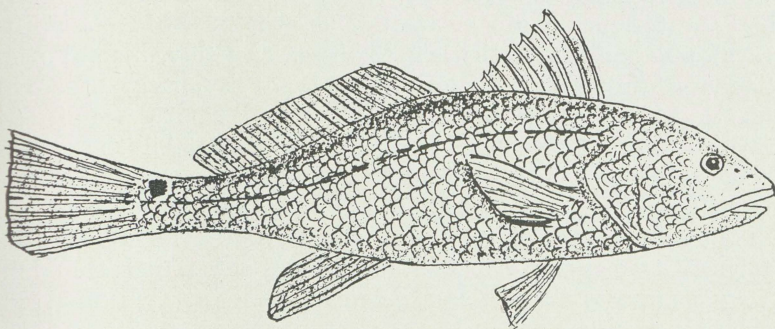
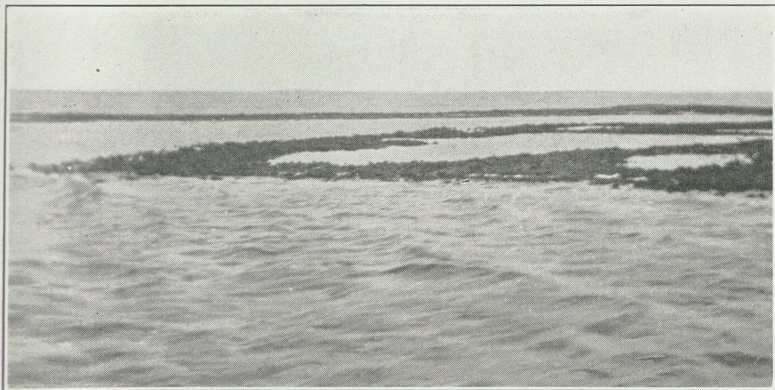
BUILD AND SIZE—It is a drumlike, toothless fish, built in some respects like a salmon. Like most gamefishes its body is streamlined, beautifully formed, elongate and well rounded. Channel bass spawn during the early fall. Then they come into the Gulf passes and river mouths. At the end of a year their length is approximately 12 to 14 inches. Quantities are take by commercial fishermen at this stage. The second year about 8 to 10 inches growth is added and they move out into deeper places. During cold weather they return to the rivers and channels, and also inhabit tidal estuaries, lagoons, bayous, etc. The following year their weight averages approximately ten pounds and length about two feet, traveling being done in schools. Growth thereafter is comparatively slow, the five and six year olds being three or more feet long and weighing about 35 pounds.

Located at the base of its body on each side, just before the tail adjourns, is a conspicuous rounded black spot or two, an inch or less in diameter. Some of them have several such distinctive spots; the author has counted as many as thirteen on an individual redbfish.

A few years ago our esteemed fishing companion, Judge Herman Goldstein, heard that some "immense" redbfish had been observed in Apalachee bay, near Panacea, Florida. We promptly set out in the hope that there was truth in this inveigling report; if possible we hoped to contact some of these "monsters". Securing such boat accommodations as were available we trolled religiously for several hours—without the benefit of even a strike. Even to devout fishermen, who are noted for their patience, this was becoming monotonous; but, we decided to give the place a thorough tryout. Before the sun went down we jointly concluded that an enthusiastic fellow's excess mental labors had caused him to concoct the fanciful, extra large-sized channel bass. If otherwise, we reasoned, would

not the place's reputation cause it to be besieged by zealous fishermen?

Just as hope was almost gone the surprise of the season appeared in the form of a tremendously large redfish. Our friend was using very light tackle, as befits his expert fishing qualifications; and after little more than an hour of the most perfect technique ever visited upon any fish the much sought specimen admitted it was whipped, remained at the surface and turned on its side. A few minutes afterwards, in the village general store, this fish's measurements were found to be as originally described by the enthusiastic report. It was several feet in length and weighed exactly $32\frac{1}{2}$ pounds. Its beauty and plumpness were truly remarkable.



($\frac{1}{4}$ average size)

REDFISH (CHANNEL BASS) frequent shallow habitats such as oyster bars, bayous, sandy stretches, shore cuts and sloughs. They exist principally upon crabs, fishlets, worms, insects and tiny marine life.

So, not all tales of "ideal spots" are yarns. Moreover, in fishing a degree of patience is sometimes required to be exercised that is not called for in other sports. But, we cannot refrain from also remarking, not everyone is as gifted in manipulating the rod and reel as is our contemporary. He rarely fails to "yank them out" if they are there.

RECORDS—The red-drum or sea-bass is frequently taken by anglers surf-casting along shores where deep cuts and sloughs exist. For trolling artificial lures, such as feather-jigs, spoons or plugs are as acceptable as cut bait.

Off Redfish Point, near Fort Myers, a 41½ pound channel bass was snagged in February, 1935. In the vicinity of Sarasota a fisherman's efforts were rewarded with a 48-pound specimen, but more details cannot be learned.

For more than twenty-five years the record redfish was sixty-one pounds. Then a sixty-four pounder was caught, by Henry V. Stratton, in the surf at Corson's Inlet, N. J. In 1929 this record fell and is now held by Charles D. Beckmann, who took a seventy-four pound redfish from the waters at Chincoteague, Va. You can form your own mental picture of this 55-inch long bass, with a 34-inch girth. Its right to the title "grandpappy" is not questioned.

The name, "redfish", is derived from the prominent, copper-colored or bronze-hued scales covering the fish's body. These average about one half inch in diameter. The mouth is small and the upper jaw fairly blunt.

The first part of the body (probably one fifth) slopes upward, giving the "streamlined" effect. Then, a prominent back-fin (composed of one small and about 9 additional fin-rays) tapers down to the last of these. Another, second section of the dorsal fin follows; this latter is almost uniform in size but is longer, being supported by some 25 prominent rays along the remainder of the fish's back. All the other fins are "heavy" in their construction. This is especially true of its caudal (tail) fin. This end is a continuation of its well-developed body. Altogether, this tail-fin and its other fins furnish a tremendous amount of power, speed and flourish. They guarantee the angler a galvanic, demonstrative and fascinating gratification.

HABITAT—Above the Chesapeake bay, down the Atlantic coast past the southern end of the Florida Keys, and along the

western coastline of the state and beyond Pensacola, quantities of channel bass may be found in cooler months. They frequent shallow places, three to six feet deep, as a rule, and prefer such retreats as oyster bars, sandy stretches, reefs and bayous and creeks.

In and around the Ten Thousand Islands, both at the myriad entrance-mouths and passes to the Gulf, as well as far inland along the mangrove bordered rivers and creeks, a plentiful number of these bass are in evidence. During very cool periods a place where excellent results may usually be had is in the mouth of the St. Marks River, a few miles below Tallahassee. Also do not overlook Crystal River and Sanibel Island, farther down the west coast of Florida. Surf casting at Daytona Beach yields excellent results.

In tropical waters, wherever a supply of small water life is found there will probably be redfish if the other conditions are met. They exist principally on crabs, fishlets, worms, insects, crustacea, tiny mullet and similar marine life. Because of their tiny mouths their food must, necessarily, be small.

TACKLE—The best indication of the sportsmanship of a fisherman is the observance of the rule, "Light tackle enables the angler to hear the fish's heart beat". When this gamefish goes flying through the waters, harum-scarum, consideration should be given the fact that it flees for its life. Therefore, certainly not more than 4 or 5, or under exceptional circumstances, a 6-ounce tip, with No. 6 or No. 9-thread linen, cuttyhunk line must be used. Remember, it is not how quick one can take his catch, but how much "play" can be developed after the initial "strike." The boldness of a fish, its vigorous and sublime stratagem will all be lost if it is ensnared by heavy tackle. This applies alike to all the different gamefishes, but is stressed in this case because of the shallow habit usually available for the performance of redfish.

FOOD VALUE—Young redfishes are fairly good food value, but the flesh of the adult is a trifle coarse, lacking in flavor. Notwithstanding this, thousands of pounds find their way to commercial markets. Fishermen and sportsmen eat quantities of it, too.

ADVENTURE WITH A MANATEE (SEA-COW)



REHISTORIC, practically extinct, the manatee seldom shows itself. It inhabits calm, tropical waters, coastal lakes and bays, where the brine is brackish. They nearly always live in lakes or near river mouths, ascending the fresh waters to feed.

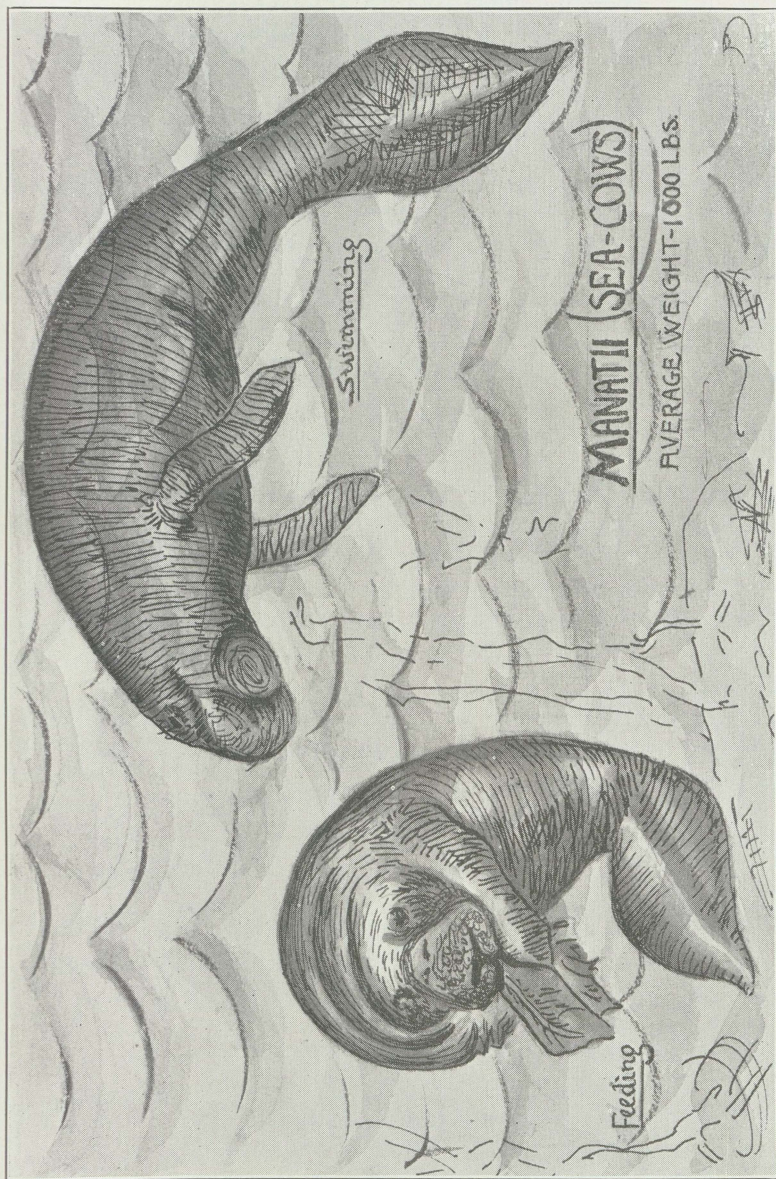
Naturalists point out that these herbivorous mammals were once land-animals whose great, great-ancestors managed to get their massive figures upon sunny shores. That was ages ago. Now this nearly black, thickskinned, almost naked (no scales) manatidae spends nearly all its life beneath the surface. Manatii are vegetarians, living on seaweeds, marine-grass and similar bottom growths. They weigh from a hundred or more to a couple of thousand pounds.

The limited number of these sea-mammals alive today is estimated at less than 500 or 600. For this reason they are given the benefit of legislation which is intended to render them immune from harm. Most of those known to exist are found in backwater, desolate arenas of large bays (like those in the vicinity of the Everglades coastal region), as stated above.

Only a privileged few fishermen have had occasion to observe a family of manatii lazing on the water's surface,—a young, suckling calf with its parents closeby. They have lungs and come to the surface to breathe, at intervals. The slightest disturbance or unnatural sound or water-movement causes them to "sound" instantly.

In no sense, directly or indirectly, is the manatee to be considered a gamefish. Only because it is almost extinct, your humble "Dean-of-Fishing" desired to observe a specimen in its native habitat, at close range. Confidentially, one was so contacted. Observing a bull, with its cow and calf, our guide excitedly cautioned us to be absolutely silent. Cutting off the boat's motor to eliminate the noise from this source, with the genius this individual naturally possesses for such intricate duty, the male was separated from its family. One of our party begged insistently that we "run it down"; it was with great reluctance the plea was granted The "bull" was lassoed so we could study it. A tussle ensued, one which proved as unique as it was strenuous.

No greater degree of anxiety and excitement ever existed aboard a fishing smack: The infuriated "bull" tore through the waters with the orthodox customs of an antagonized bull



in a Spanish arena. This contest continued for more than three hours. Long before, we had concluded that our desire for "fun" had been fully satisfied; no one disputed the prowess of the water-being. The question which bothered the human assembly was how the fighting-campaigner could be released without any harm attending it.

The problem was most difficult to solve. The combined diligent efforts of three anxious visitors, coupled with the guide's and his assistant's were unable to disengage the cable tow.

Night was coming on. The warm-blooded animal was fully 14 feet long and weighed not less than 1400 pounds. Finally, with scrupulous and faithful effort, it was towed to a river-estuary. One of our number was induced to perch himself on the tremendous back of the sea-cow. He slid off as smoothly as though he were headed down a greased pole. Off the slimy surface into the water he went—quicker than a flash! The incident removed some of the tension existing on account of the situation.

The manatee was released unharmed.

The single experience is enough. Never again, the author takes an oath, will such "whale tussling" be permitted on his expeditions. We will, hereafter, not digress from our chosen endeavor,—combat with game fishes, exclusively. Scientific knowledge will be obtained in some other, more pleasant manner.

CHAPTER SEVEN

Trollingers¹

*"All these woes shall serve for
Sweet discourses in time to come."*

—Romeo and Juliet, Act. 3.



THE EXERCISE of their talents in exotic fishing endeavors makes lasting impressions upon the fisherman's mind.

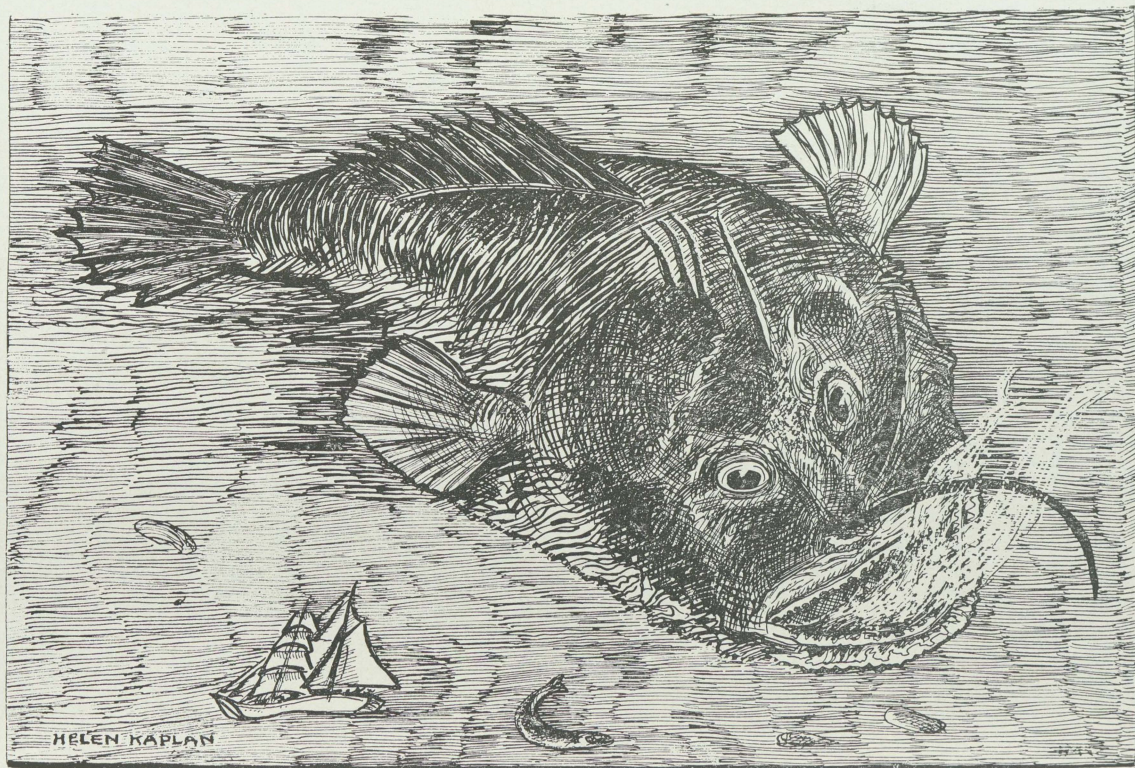
Each has his own singular way of accomplishing and relating to the skeptics back home his own piscatorial feats. Members of the *Grand Fishing Fraternity* who are of this caliber may be pardoned, therefore, for being too humanely elastic and imaginative in their flexible monologues on this favorite sport.

For, it should be known, each of this sanguine clan puts his heart and soul into the practice of this phase of his passion. They follow the idea advanced by Alexander Pope, who reasons that "He lives twice who can at once employ the present well and e'en the past enjoy".

Have you heard of the *Trollinger Society*?

This breed of angler is quite industrious verbally and picturesque in speech as well. He has his own, individual methods of making life happier, brighter and longer. He is of the "kibitzer" type. It is reported that the Trollinger Fraternity was chartered ages ago by two Spanish noblemen priests. They founded the great order upon their return from a glorious fishing venture. The code of the *Trollingers* is strictly confidential, but we are permitted to have insight into its mysteries in the hope that we may aspire to membership in the order:

¹From the word "troll."



TROLLINGERS habitually make the most insignificant episode become a startling experience . . . With befitting generosity a small fry grows by leaps and bounds . . . until it becomes a chivalrous sexigist (6-finned) of the deep, a distressing monstrosity . . .

TROLLINGERS' CODE

(1) *TO STIMULATE and augment the fine and delicate art of discourse on fishes and fishing; to enrich—even by exaggeration—the absorbing achievements of its members, thus keep them in proper training during reflective, sedentary periods between jaunts.*

(2) *To deliberately eliminate and evade all bad points in their tales; but to stretch and magnify sundry incidents, seizing every opportunity to color and shape disconnected events and incidents into grotesque, puzzling and bewildering occurrences.*

(3) *To develop themselves into experts and specialists in causing their imagination-factories to operate at full capacity and overtime in conceiving and transmitting details of the fisherman's brain.*

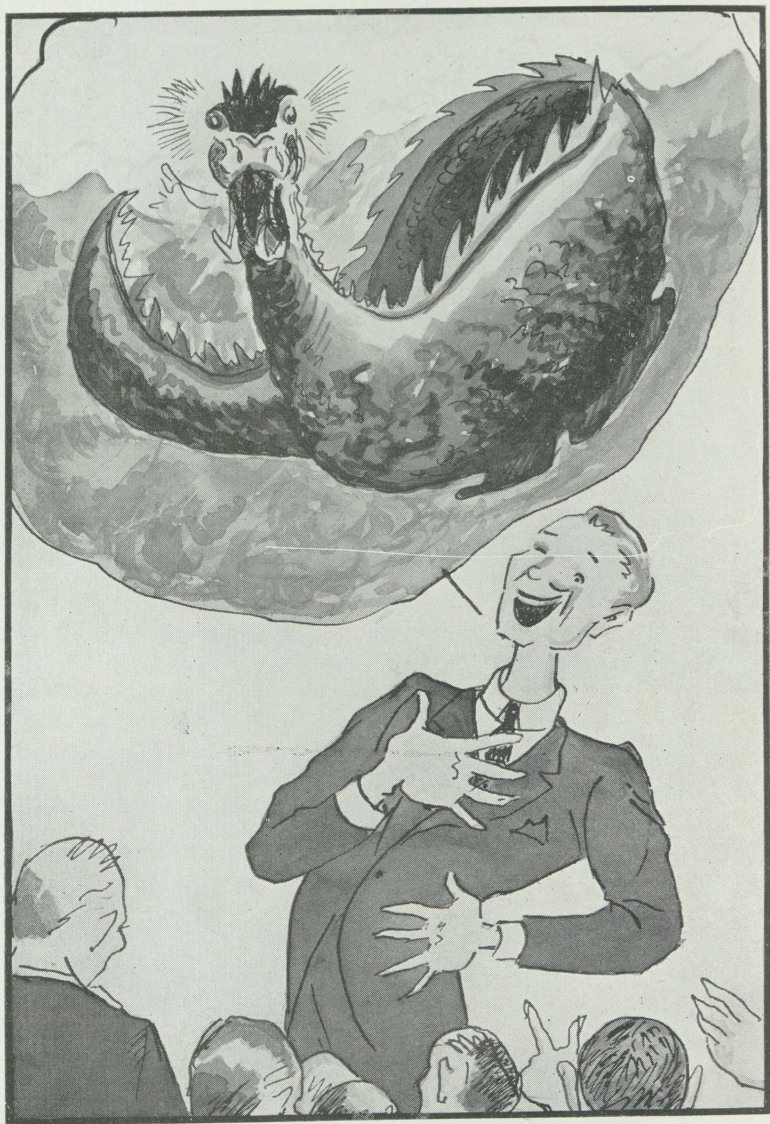
(4) *To practice and perform embellishment of facts so artistically and shamelessly, by continued recital of impossible events, that one will excel even his fellow-members in narrative, recital, relation and incident, material or immaterial, as the spirit moves him.*

(5) *To make all such fabrications and improbable events or happenings sound realistic and original.*

It is founded on the principle that "If one toot not his own horn, then by whom shall one's horn be tooted?." Modern science cannot distort facts so completely. No other human beings can fly so high in the world of sham, with so much apparent ease in the field of amazing speculation. *Trollingers* believe the statement of Protagoras (481 B. C. ?) that "truth is a collective name for men's opinions".

Their quips and utterances are unrefined. They tackle any part of a venture just as it pops in their minds. Theirs are heroic points of view, but not strictly in accord with the real facts. Upon them has been bestowed the classic and immortal gift of gab. This trait is loosed at any time or place—without notice—the only proviso being that a listener be within earshot.

In their longing to relate their imaginary experiences they do not stop at the pitifully amateurish "prize-lies" such as



WHAT MYSTERIES THE UNKNOWN OCEAN'S ABYSS CONCEALS!

. . . to stretch and magnify sundry incidents, seizing every opportunity to color and shape disconnected events and incidents into grotesque, bewildering experiences . . . The beast escapes during the emergency . . . as mysteriously as it first appeared on the scene. . .

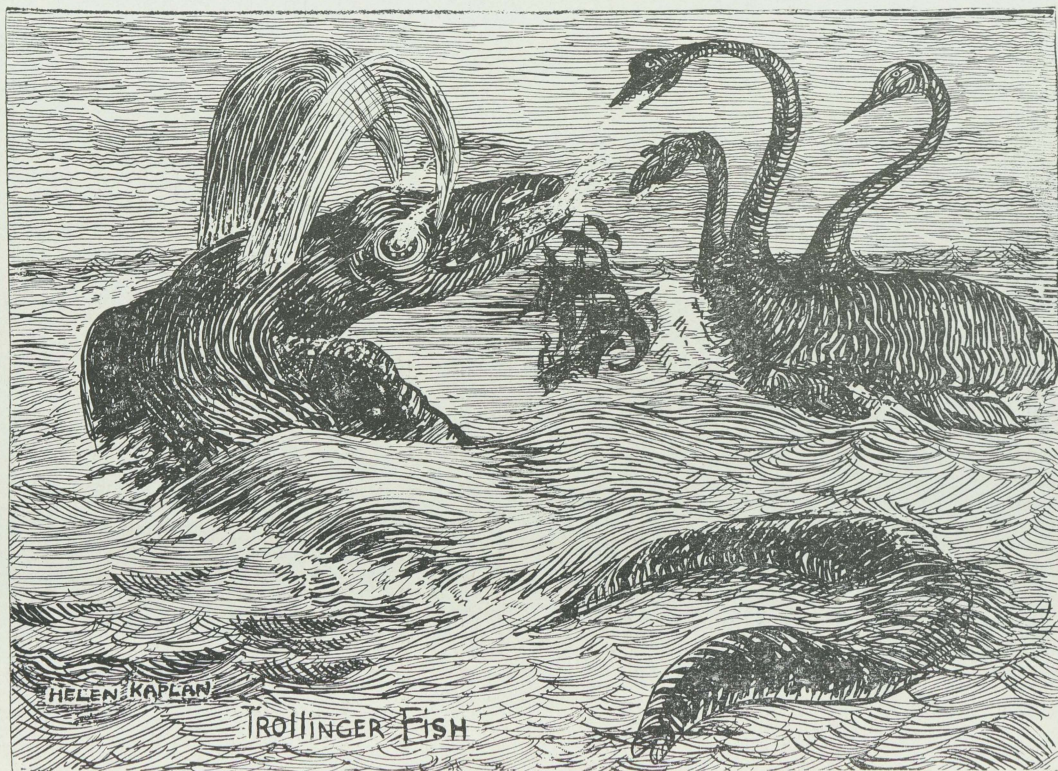
are indulged in by our friends at Burlington, Wisconsin (originators of the Burlington Liars' Club, which Mr. G. B. Walsh of Philadelphia refers to as "mere cowardly exaggerations"). *Trollingers* offer well-conceived lies; lies which have international incident; the kind that makes one's blood run cold and sends a tingle down the spine; lies to which people listen open-mouthed.

In time these lies become famous; they become tradition. Then they are eagerly passed on for public consumption, from unbeliever to skeptic. Like Gorgias (483-375 B. C.), the *Trollingers* boast they are privileged to settle any question in whatever way they wish it decided. They also claim to be able to prove any theory, especially if they originate it, provided it pertains to fish and fishing.

They insist there are three distinct kinds of lies: (1) plain lies; (2) damn lies; (3) fishermen's lies. All three degrees are indulged in freely and often by *Trollingers*. The latter of these divisions forms one of the regulating principles of the fraternity.

Verily, no department of nature is so prolific in supplying fertile matter for the wild fancies of their imaginations. What mysteries the great, unknown ocean's abyss conceals! Did not our ancients have their sea-divinities and their monsters of grotesque measurements and shapes? Was not the true intermixed with the fable in legends handed down to us? Did not the earliest peoples indulge in prodigies and absurdities of the deep when it concerned angling? They did. Even the great mind of Aristotle, Father of Natural History, could not reject credulous tales of fishing in his day. Also, Pliny, the historian, assumed weird and fantastic, wholly impossible descriptions in fishing tales.

Trollingers have advanced their decrees and practices since olden time. They allow cameras and scales to be doctored to suit fancied contingencies; they permit the free use of measuring rods of rubber and elastic-rulers. Skipper-captains and fishing-guides in general may be permitted, even suavely encouraged by bribes and otherwise to corroborate all the incredulous and imaginary portrayals recited by *Trollingers*. Once a highly seasoned epilogue is uttered it may not be retracted or recounted; but, it may be added to at will, limited only by the chronicler's ability to distort the facts.



Now that its enormous bulk is exposed, the Trollinger is able to view the grisly, maritime creature: its fins are shaped like dragon's wings; from its face pours fire and smoke; the rear half is covered with massive welts and protruding, jagged points. The grotesque form moves with inward and outward swayings. All its other embodiments are equally as hideous to behold.

In 1742 one Hans Egede, for example, in a "Natural History of Greenland" recorded

"a marvelous sea-monster, observed by him in Davis Strait Such an exceedingly large animal that when it raised itself out of water its head reached as high as a mast; body throughout was as thick as the ship itself, compared with which it was 3 or 4 times as long . . . It had a long-pointed muzzle, spouted greater than a whale . . on the forepart of its body were 2 great, broad, footlike fins . . the uneven skin appeared armed (with scales). Otherwise it had the form of a serpent, especially in regard to its posterior part When it went under water it threw itself backwards, sticking its tail above the surface at a height equal to the ship's length"

PRINCES OF LIARS

Even Ananias, Prince of Liars, is frequently humiliated and put to intense shame when in competition with one of these cheerful mortals who indulges so eagerly in his licentious and fabulous recitations—a by-product of his adventures when fishing.

This advanced type has been known to make the most insignificant episode a startling experience. With befitting generosity, some 10 to 50 pounds, plus a few feet or yards in length (and other trifling misrepresentations) are added to enhance the majestic proportions of an ordinary sovereign dwelling in the seas.

Thus a small sized fry grows by leaps and bounds. With the continued telling of it, soon it becomes a chivalrous denizen of the deep—a monstrosity, whose colossal bulk is encountered and mortal combat ensues. The ghastly marine disaster (for such it turns out, in the end, to be) is an ordeal lasting endless days. During the record-breaking, historic fish battle tidal waves and other catastrophes occur.

The fish-monster proves to be a sea-serpent, uncomfortably real. It may be compared with Argus, the 100-eyed monster slain by Mercury; or, possibly, Hydra, the 9-headed water serpent which Hercules slew. No matter how dubious science may be about the matter, our *Trollinger* informs us that it actually exists and does not belong to the junk-heap of worn-out myths. Is it the fault of this distinguished group that the tremendous marine creature is not captured and classified in the natural-history books so the human race may be enlightened?

Our narrator clearly shows how the thing attacked—with the force of a submarine explosion, causing the calm, smooth sea's waters to be shaken with appropriate loud-splashing and disorder, almost to the extent of capsizing the boat. First, its tremendous head appeared above the surface. From its mouth and nostrils were emitted fire and brimstone; the sulphurous breath was felt by a freighter many miles away. Its neck was described as having the gracefulness of a swan. The legendary dragon's body proved to be snake-like; it moved forward with certain inward and outward swayings of its hideous body; large welts and jagged-points made their appearance one by one until, unbelievable as it may at first sound, the whole series of them showed up the great, formidable, hideous monster in toto.

Now that its awful-looking bulk is exposed we are able to view the ferocious sea-creature. It has numerous rows of teeth, each as large as an elephant's tusk. We see its color is a slate-gray or chocolate-brown. The whole is adorned by large red and purple stripes. Dashes and splotches of yellow appear on various parts of its form. Underneath, its belly is a creamy and lustrous white. The whole being seems attached to a spear-like tail,—and we are able to understand why, with a single stroke of this powerful "end", the demoniac thing pushes aside a ship or sinks it, as his pleasure dictates; or, it swallows two or three sinking human beings which it has yanked overboard, at a single gulp, and takes in all water within a circumference of a mile around, sparing only Nerus, "The Old Man of the Sea".

But, alas! Except in the mind of this *Trollinger* the mythical, sea-going dinosaur or ocean-scorpion (whichever or whatever one may choose to call it) destroys all available tackle. Having also wrecked the craft, and pitched all hands overboard with sudden violence, the beast escapes during the emergency, disappearing beyond Atlantis (the mythical island-continent opposite Mount Atlas in the Atlantic). This it accomplishes as mysteriously and as terrifyingly as its appearance on the scene. Then it takes its place amongst the strange, super-species which once existed. It is never heard from or of again.

In the particular case before you, however, it is not necessary for *me* to resort to the advantages and privileges of a *Trollinger*. In fact, the above matter would not ever have been mentioned except that, from what is to follow, you might not be prepared for the things which are encountered in fishing expeditions. It should be understood that *my* veracity is not to be questioned.

CONVENTION OF THE TROLLINGER SOCIETY

*He is not drunk who from the floor
Has power to rise and drink some more;
But he IS drunk who prostrate lies
Without the power to drink or rise.*

ONCE upon a time your author was invited to attend the annual assembly of the internationally-famous TROLLINGER SOCIETY. Fellow Trollingers came from every quarter of the globe. The elite of the fraternity were present. Each was armed to the teeth with thrilling adventures which must be let loose upon his unsuspecting brethren.

Leaving the Florida East Coast on a luxurious yacht we were duly carried to sea. In due time anchorage was had in the harbor which fronts the abandoned Fort Jefferson at Garden Key in the Dry Tortugas Islands.

With customary ceremony the Trollingers were elaborately feasted. The banquet consisted of 60 different courses; liquids (from various shaped containers) possessing the rarest and choicest flavors were served, as befitted members of this unusual fishing-adventure congregation. Each succeeding drink outranked its predecessor in strength. The rare fluids flowed as freely as the adjacent waters of the Gulf Stream, while Ingersoll's message of cheer was read:

"I send you Trollingers some of the most wonderful whiskey which ever drove a skeleton from a feast, or painted landscapes and fish-escapes in the brain of man.

"It is the mingled souls of wheat and corn. In each drop are the sunshine's blessings and shadows of contentment that chased each other over the billowy fields; the breath of June; the carol of the lark; the dews of night; the wealth of summer and autumn's rich content—all golden with imprisoned light.

"Drink, my Trollinger friends. It will enable you to recite tales of angling which historians dare not record; you will hear the voice of Oceanus (Queen of the Sea) and maidens singing, mingled with the laughter of children.

"Drink, and feel within your blood the star-lit dawns, the dreamy pleasures of perfect fishing ventures on delightful days, the richness of nature blended into your soul.

"Drink, for it brings back memories of your angling efforts crowned with glory; combat with fish that ruled undersea empires; fish whose proportions rate with the world's mightiest things.

"For 40 years this liquid joy has been within the staves of happy oak, longing to touch the lips of men who are Trollingers.

"Drink—for I am with you in spirit."

Obedient to this sublime message, the TROLLINGERS did drink. Then they were in proper physical and mental condition to proceed.

Whereupon, all chairs and other ship's furniture (which might have served to relieve the load on one's lower extremities) were removed—by the simple process of being cast overboard with reckless abandon. This was appropriate, since such articles were no longer desired or required. Everyone found it more convenient (some even considered it necessary) to drop to the floor of the yacht. In fact, the majority of the assembly were quite unaware of the removal of these fixtures, because of their own condition.

* * * * *

Sensing that the noise and confusion, which ran riot, would not soon diminish, the Master-Trollinger shouted in vain. His remarks were not easily comprehended, but as nearly as can be recounted, he announced that

“Some Trollingers lie beneath the churchyard stones
and some before the Speaker.”

Then it was proclaimed that the next order of business would be

“To hear the extraordinary and indescribable adventures of Trollingers and their angling episodes,”
and he solemnly warned his hearers of the ancient edict that:

“The EVIDENCE itself must be produced in all cases reported, for proper examination of the Trollinger Society. Thus the truth of the occurrences related shall be substantiated.”

(As heretofore explained, this custom originated ages ago by two Spanish noblemen priests. They founded the order after a fishing jaunt. To this very day all the ancient and honorable customs prevail.)

That you may understand and appreciate the modest genuineness of a Trollinger narration, their super-quality and naturalness, a single yarn will be recounted.

A member of former good repute called for and was granted the privilege of leaning against the ship's side (he being un-

able to withstand the ordeal otherwise). Staggering to his clumsily-acting feet he muttered that while indulging in his favorite sport in the brackish waters of the Shark River region (near Cape Sable) he was abundantly successful . . .

He had just released his 671st fish (counting none except those weighing in excess of 250 pounds) that particular day As he prepared to conclude his activities by reeling in his line . . . suddenly, without warning, something struck with the speed of a thunderbolt the line was violently spent all his expert manipulations to retard its progress, as it moved seaward out into the Gulf of Mexico, proved unavailing the entire 17,400 yards of line disappeared in a single onrush . . . the esteemed fishing-knight was first dumfounded, then panic-stricken! He trembled with fear and intense emotion as he gazed at the last of the line.

. . . Whatever held it relaxed not a trifle! our Trollinger was ruthlessly jerked to the craft's side a moment later a severe cracking occurred and the entire side of the yacht, where stood this angler, parted company with the remainder of the vessel. Before he could shout for help he found himself sprawled in the center of the ship's part, being towed rapidly to sea . . . he felt a nauseating feeling overcome him

. . . . minutes, then hours flew by . . . and grew into long, never-ending days . . . without provisions or thirst-quenching liquid for weeks; nothing to sustain life . . . the perilous journey continued.

. . . . on the 27th day the Panama Canal was passed Cape Horn (at the Southern extremity of the South American continent) came into view and faded from sight as it was rounded on the 93rd day towards the end of the 4th or 6th month (time was slightly lost track of) a great catastrophe (which is now unrecorded history) took place . . . it shook the entire shore line of the great Brazilian country an unfortunate happening, but one which turned out to be a blessing in disguise for our starved and famished Trollinger . . . and, too, it was only then that it became possible to know what form of sea-beast was responsible for the calamity.

. . . . slightly wiggling its mammoth tail (which had a spread of 5,831 feet) the monster's action almost defied nature . . . part of the sea itself was removed from its accustomed habitat . . . but, with the Heavenly Supervisor in control,

it merely resulted in a gigantic tidal-wave no further damage was done than inundating the entire territory of Brazil (larger than the U. S., 65 times the size of England,—its extreme dimensions being 2695 miles from east to west, and about the same from north to south, an area of some 3,285,318 square miles, comprising $\frac{3}{7}$ ths of the entire South American continent). This resulted in the great Amazon river and its tributaries being formed. Casualties were reported throughout the land . . . but, as stated, the disaster was more fortunate than unfortunate, for the monstrosity thus caused itself to become beached . . . it became helpless

An assembly of survivors of the country was called . . . this conclave debated with the zeal of Roman senators as to the proper disposition of the marine libertine, whose dimensions were found to be

6,034 feet in length—

556 feet in girth—

243 feet in head-circumference—

18 thousand pounds in weight (estimated)

But, this being a minor detail, we must give our attention to our Trollinger member, who was discovered by the natives in a somewhat pitiful condition. In fact, he was barely alive after the drastic experience.

Upon being recognized as a Trollinger Society member in good standing he was sumptuously wined. Tons of food were placed before him, all of which he consumed with a hearty appetite, this being the first nourishment he had partaken of since the Trollinger meeting at Tortugas eleven months previously. This was washed down with a few casks of rum brought to him for that purpose and he felt better at least well enough to be left alone for a while.

Ministers and Representatives Extraordinary (all Trollinger members) throughout the world were cabled and eventually they reached a decision

An "SOS" call went out for all ships in that section of the universe to gather at the scene of the disaster and 196 of the world's largest ocean-going leviathans responded . . .

Special hoisting machinery (built for the purpose, imported and rushed from foreign countries, nearly putting an end to the depression then raging) was erected

The enormous fish's proportions were securely fastened across the upper decks of the ocean-going vessels

Finally, the tremendous burden was loaded and carried with all possible haste to the specially constructed Port of Everglades at Fort Lauderdale, Florida, and its overpowering burden held aboard these ships until a few miles of the main highway between Palm Beach and Miami could be closed to traffic

Then the galloping, mystifying, nameless relic of sea-monsters was put to death (by shell fire from 22 warships brought to the scene by the combined navies of several countries)

. . . and its body was laid out on the closed highway. (This accounts for the detour existing at that time on the highway, as well as the washed out condition of the sea walls along the route of travel). Making no secret of it further, everyone now may know that it was not the hurricane of 1935 which wrecked Southern Florida, but the backwash of the tidal wave, caused by this fish's wiggling his tail near Brazil, was actually the sole cause of the trouble

Let it be known that taxidermists and specialists from every known country were called. They all assisted in mounting the over-ripe specimen so that future generations could witness the truth of the fish's existence. The purpose, also, was to stop its growth, it being an accepted fact that by mounting a fish its growth becomes checked. This is admitted by Trollingers themselves.

With the sea-dragon thus exposed, Mother Nature now took part in the doings. During the tedious act of mounting it, a phenomenon (which may never be repeated)—one more far-reaching in its consequences than all the incidents just related—took place:

The tropical sun's rays ordinarily are drawn out to sea, away from land. However, these rays were attracted by this fish. Readings on temperature meters (designed and constructed for this occasion) showed that the heat rose to more than 410°F. It is but a consequence that the oily skin of this fish could not withstand such degree of intensity. Result: the fish began to evaporate.

And the specimen shrank proportionately!

At this point in the proceedings the Master-Trollinger banged his gavel. "O-r-d-e-r"! he shouted. The confusion was running riot. Several members, unable to withstand further details, had jumped overboard to spare themselves the pain of hearing more.

The speaker was informed that his allotted time had expired . . .

Boisterous calls now came from those Trollingers who had not completely swooned from the combination of food, liquids, story, and boat-rocking waves . . .

Loud and repeated demands could be heard for the *evidence!*
"We want the evidence"!

* * * * *

Whereupon, without further ado, the muchly desired and all-important evidence was duly produced and properly presented.

It was in the form of a rough plank or board; about 2-feet in length, approximately 12 inches in width, painted a sick-looking color which might have been green but was a blend of blue and orange. Upon this inartistic effort, this board, at which some paint had been thrown, was a fish—

A first glance it resembled a dried-up herring . . its eyes were punched out . . and the shriveled thing was made fast to the board, with sixteen or more rusted nails holding it fast thereto, these nails bent over through careless or inexpert hammering . . This weird combination of fish and board was held up for the inspection of all who cared to see, as proof of the Trollinger's experience

'Midst noise and confusion our Trollinger finally succeeded in remarking to the dumfounded audience, in sincere and earnest tones, that he too, like his fellow members, was greatly surprised when he was first allowed to gaze at the *MOUNTED* specimen

Moreover, he explained, this fish—so unusual in all other respects—had proved itself to be quite different from all other sea animals. It was equally different in its most unusual aspect: instead of remaining true to its original dimensions, as all good, respectable, *mounted* pisces have learned to do, this fish *SHRANK* from public gaze!

"It must be a relative of Satan", avowed our Trollinger.

The Committee on Awards now brought in its report. For this unduplicated experience, so fully proven, our Trollinger contestant was granted the society's first prize:

After much deliberation and ceremonial, accompanied by speech-making suitable to the occasion, the worthy prize was handed out:

A rubber fish-hook, to which was attached a tag which stated its extraordinary qualifications: "This hook can be stretched to any imaginary proportions."

* * * * *

The ceremony having been performed, all present and able joined in the Trollingers' song:

"Happy are we met,
Happy have we been,
Happy do we part,
Happy to meet again."

Whereupon the meeting was duly adjourned.



CHAPTER EIGHT

What Makes a Fish Strike



VEN SKILLED fishermen wonder!

Our observers have discovered and reported the facts to us. Inasmuch as getting a fish to strike has so much to do with the art and science of angling, it calls for explanation.

One reason is that when the spawning season is on, the smaller species eat the roe, or eggs. This makes them the enemies of the larger fish emitting this. The latter, during this period, become savage-like, determined to snap up and destroy the fish marauders.



There is another cause, equally important. We have seen from previous pages that the fish-eye is extremely large, it can see well in all directions. Anything which moves in the waters near him causes a sensation; it registers on the lateral line, or nerve-system. But despite all this, the weather con-

ditions being ideal and the number of fish plentiful—still, no “bites”. What is the trouble?

It may be due to any one of a number of things. Perhaps, the water itself may contain a choice variety of desirable foods. Our “bait” or “lure” may be lost amongst so many objects and not be attractive to the fish. The angler’s skill is taxed to the limit. Still, to make the fish strike is possible of accomplishment.

Pugnacity! Inclination and readiness to fight!

That is what causes a fish to strike at objects in its path! Water temperature, the fisherman’s skill, tempting lures, sheer perversity, the fish’s appetite at the moment—all these fade into the background compared with the “instinct to attack.” However, when the water temperature is low the fish is not disposed to attack freely; in cold waters they take little or

practically no foods. In tropical waters—ah, these are his battle-waters!

Let's assume Mr. Gamefish has just eaten of the sea's larder. His stomach is full; it is about to burst with the completeness of a heavy, satisfying meal. Then, of course, it is not for his appetite that he strikes at our bait. Rather, it is for the same reason that you or I would, under similar circumstances, be made to strike.

NUISANCES—Suppose you are busy (doing something or doing nothing—it doesn't matter which). While so occupied (or unoccupied, as the case may be) along comes a stranger. This individual parks his physical load, uninvited, next to you. You cannot help but observe that he carries a large tin-pan and a heavy stick. Then, for no apparent reason, this intruder upon your peace and tranquility suddenly commences to make a series of loud and worrisky noises. He thumps and beats his stick, violently, upon the tin-pan. He performs his nefarious act with unceasing regularity or spasmodically, as his pleasure dictates. . . .

For a time you tolerate it; then your patience becomes worn. You give the interloper a menacing look, but he pays you scant attention. He continues to hammer on the tin-pan, the irritating clatter resounds on and smites your ears with maddening regularity. Soon it has the effect of the booming of cannon; on your hearing it bursts with the devil's tattoo . . . Rap . . rap . . . rap . . . rap . . . the discordant notes rend the air . . . rap . . . rap . . . rap . . . You become figity and vexed . . . rap . . . rap . . . rap . . . rap . . .

Ere long this tormenting racket "gets on your nerves" . . rap . . . rap . . . rap . . . rap . . . You give the offender another look, more menacing than any of the previous ones . . rap . . rap . . rap . . . calculated to end the infernal boomings . . rap . . rap . . . It is also without effect . . . rap . . . rap . . rap . .

Another brief period elapses . . rap . . . rap . . rap . . . and you become uncontrollable . . rap . . rap . . You boil with rage . . rap . . rap . . You are infuriated and goaded to awful reckoning . . rap . . rap . . rap . . rap . . rap . .

By now you are apt to pick up the nearest movable object and hurl it with such force in his immediate direction that it might knock his head off his shoulders if it struck its mark. Or, you might not hesitate to do anything else which

you could to end this fanatical riff-rapping noise; you would not be much concerned if the evil-doer himself were also put out of the picture.

When this takes place (whether or not you hit your target) the custodian of the stick and the tin-pan will certainly carry on with more silence than previously, if your action is as above described. For, although he has caused you to suffer almost to the point of rupturing a blood-vessel and apoplexy, your primary object, at least, is accomplished! the clatter, rattle, thumping noise no longer explodes in your ear. The worry abruptly ceases, although it may result in a fight.

It is because he has goaded you to desperation that you felt it your solemn duty to "strike" this fellow.

FISH TEMPERAMENT—Similarly, a fish "strikes" when not actually in want of food because he is forced on account of his nervous, temperamental spasms to do so. Why?

Because his home is in the water. We have invaded his home. Worse, we have cast on top of his place of abode something which wiggles, darts, zig-zags, twists and twirls! Our "lure" languishes, jumps, moves and runs in a snappy, uproarious manner on his roof. It is disquieting and disturbing to him to have this occur, because we continually jerk and flip or pull the string to which our bait is attached. We drag it along in the rear of our moving boat when we "troll". The action of the lure or bait resembles that of a small fry—whether it is made of feathers, wood or metal or be a strip cut from the silver-belly of one of his fish-friends in the shape resembling a fingerling. The latter is a first-class irritator.

Whatever it is, this thing dangles over his head. At first its motions interest him, then arrest his attention. Finally, he becomes fascinated. Then, with continued watching, he becomes unable to control himself; he ceases to stand idly by.

Normally, a fish has too much discretion to move too quickly. So, he just dilly-dallies around a while; he follows and observes this tantalizing thing; he cruises along in neutral. His fish-eye is fixed on this minnow-looking object. All the while evil thoughts are born in his fish-mind.

"What trick of fortune brings this squirming, shaking, frightened thing almost within my reach? I've a mind to knock it senseless, but somehow I can't make up my mind. How it shines and glistens! Umph! it acts as if it were

lost. I believe it is panicky with fright. Maybe it is wounded. Think I will take charge of it—immediately!”

When this “reasoning” occurs, the bait’s services are complete. Mr. Fish is lured. Excitement is now certain and it may come at any moment. What if he has partaken of the fullest meal in his entire fish-career, or his torso is bloated and extended beyond its normal proportions because of the abnormal amount of food he has just consumed! He has spied this frivolous, sea-going dupe and has remained as far as he dares from it.

STRATEGY—As we have observed in the case of the peculiar fellow with the tin-pan and stick, in due time the nerve-system is taxed to the limit. The reaction is the same in fish and man. An overwrought desire is born: “Smite this antagonizing baffler.”

When he can tolerate it no longer, Mr. Gamefish throws discretion to the winds. He resolves to devour this helpless-looking bite. Or, it is possible he craves his daily excitement. Regardless of the ultimate effect it may have on his stomach’s happiness or its misery he is more firmly resolved, now, that nothing shall stop him from catching and eating this weird-appearing snack.

Cautiously he moves within striking distance. As he does so other fish-ideas are born in his thinking apparatus. “Does this uncouth fellow dare move out from his shallow territory over the mighty citizens of the deep?”

The foxtrotting, waltzing, dancing, hesitating bait continues to skip and trip over the water’s surface, alternately gliding and diving and jumping in and out of the waves. The situation becomes unbearable. It calls for instant and ruthless action. Instinct demands that Mr. Fish jump on, crush it without any further delay or ceremony, before some other deep-sea dweller eats it, or before the fingerling can escape both him and his rival who plans to beat him to the morsel.

STRIKE—Riveting his drawn-up self and attention upon it, poised for action, with one grand leap which brings him clear of the water, he makes a ferocious jump. It is calculated to annihilate the flashy upstart.

Unfortunately, the first terrific assault is a rank failure. For such a miss his teacher-in-crime would mark him two below zero.

"Umph! he trifles with my patience, does he?" blames the oceanic-villian on his intended victim.

Foul play and cruelty enter upon the scene. The criminal-one now reeks with anger. His temper is risen to a feverish degree. His lips quiver. Contempt is registered in his fins as they stand alert. His body is possessed with fiery rage. The continued movement of the lure lashes his fury. The conduct of this unresting thing has caused him to become a nervous wreck. So angered does he become that his entire body changes color.

Summoning all his malicious intrigue he leaps again! This time it is with such force that he clears the water several feet to strike down this vaulting, stirring, eating-size provoker. It requires but a fraction of a second. He lands squarely upon it—a distance of twenty feet—cruel mouth widely extended. A resounding snap upon the lure! It is done.

Alas! for erroneous fish-reasoning.

The next moment it occurs to the fish that, "Something is radically wrong! What's this thing which tears itself through the waves?"

Just as greedy Mr. Fish closes his ugly jaws upon the victim with characteristic, vice-like effect, the line parts company from the reel, following the fleeing attacker.

ACTION—When a gamefish strikes a bait, it "heads" out with all possible speed, the marine attacker pulling with all its might. A good fisherman knows that if allowed to do so the fish will do the work, if not prevented, until it becomes tired out. Unless it is prevented from it the bait purloiner has a chance to get "fresh wind."

Before he can swallow his pilfered gain, Mr. Fish comes to an awful realization. He finds he has made a dreadful mistake. An unseen force has taken part in the situation.

Mr. Fish realizes that all is not well, so he struggles until his heart-beats stir the waters and vibrate through the fishing line to the tip of the rod. This instrument seems to be held taut by an all-powerful force. After being permitted several spectacular runs and dives, the sea-pirate gives up, not, how-

ever, before his fighting power wanes and he has exhausted all his strength.

The unknown power drags him between alternate rushes through the water towards a boat. He was so absorbed in his own misdeeds and foul intent that he failed to take heed of this craft.

* * * *

Never again will this desperado commit criminal assault on the high seas!

He conforms exactly to the specifications prescribed by the chef for our evening meal. As soon as the trimmings can be made ready, he shall swim in butter sauce. His labors, thus, shall not be in vain.



CHAPTER NINE

Battle (Fish vs. Man)

*"The stern joy which warriors feel
In foemen worthy of their steel.—Scott.*

*Marine Strategy—Contraption (Tackle)—Reconnoiter—
Zero-Hour—Secret Assault—Over the Top—Battle-Heat—
Battle Thoughts—Near Tragedy—Time—Victory Changes
Sides—Complex Actions—Untimely Request—Fish's Finis
—Defense Rests.*

MARINE STRATEGY



NATURE endowed the gamefish warrior with a stalwart body of ingenious strength. It possesses tremendous power of propulsion. It has excessive qualities of duration. These are primary battle requirements.

It occupies for itself, exclusively, a position (position in any battle is paramount in importance) of greatest value; it is in its own element, the ocean. The sea's vastness permits the underwater assailant to maneuver his forces cunningly in every direction at once, during an encounter.

The marine assaulter is capable of acting as his own general. He is equipped with inherited instinct, with crafty reasoning powers and appropriate perception. Gifted in making sudden and violent approach—contact with the enemy—silently, unobserved, he is enabled to harass and fatigue the defensive (the human) element while guarding and shielding himself.

Likewise the piscine contestant is its own intelligence officer. The fisherman's mind and attention are adroitly diverted from the principal business at hand—by some mysterious means or sign he learns of the anglers' tranquility. With occult reasoning the fish combatant, when the time is opportune for him to surprise and deceive, strikes.

As chief-of-staff the hostile watery antagonist causes the angler to expend precious ammunition (physical effort) in weakening, exhaustive and unprofitable action. At the same time it shrewdly conserves its own strength and force. With

prolonged, sustained rushes into the depths below, followed by incredible air performances, the fish alternates in fearlessly employing devastating skirmish pricks, darting hither and yon, to the utter bewilderment and confusion of the human defender. All this upsets and demoralizes the fisherman's mental and moral and, most important, his physical equilibrium; the angler becomes perplexed, confused and excited. Next he loses an otherwise smooth disposition which, clearly, is the aim of the gamefish-general in piscatorial feud.

Therefore, in the bodily form of the fish-gladiator you shall find that it is more powerful and as capable in battle strategy as nature's other distinguished creation—Man!

Such it is with whom we have to deal!

CONTRAPTION (TACKLE¹)—Having placed our personal and fishing effects aboardship, we commence our leisure life. We conveniently park our physical loads. The warming and cheerful sunny influence is most enjoyable. Around us the air is filled with perfumed, delicious cleanliness. The rare essence and intoxicating rythm of the sea-water's music almost lulls us to reverie. Life becomes easy and happy.

From your comfortable, relaxed position you shall now have an unusual privilege: you shall witness, and through your eyes your mind may comprehend battle technique more artful and scientific, on the part of both man and fish, than that employed by the world's greatest generals.

Situated as described, we occupy our time innocently. For pastime I take a little feather and piece of lead—or perhaps only a shiny metal piece ("spoon"). If available preference is given a neat slice of mullet fish, trimmed to a length about 8 to 10 inches, ends tapered. This is fastened in a particular manner upon the barbed end of an angle-hook.

¹TACKLE—Like most devout addicts to deep-sea angling, the author is elaborately equipped with an ample assortment of fishing equipment. Some of it probably will never find occasion to be used. In getting this immense lot of paraphernalia to and from fishing waters the whole is shipped by express to the nearest point of embarkation. Everything is sent along. "Making up tackle" aboardship is one of our special weaknesses.

For the impending tarpon battle which will be here described, a left-handed model tarpon-ocean reel ("Universal Star"), size 4/0, weight 30-oz., capacity 750 feet 15-thread linen line is used (Ed. vom Hofe & Co., N. Y., makers). The rod is a heavy-duty "Hedden" double-built, split bamboo, No. 49 medium salt water model, with a one-piece 9-oz., tip, 5½ ft. long. This is attached to a short (16½-inch) butt. (A lighter rod, 6-oz. tip, same length, is employed for sailfish and other Gulf Stream species).

A strip of cut bait (mullet or bonito) 8 to 10 inches long, about 2 inches wide, ¼-inch thick, tapered at both ends, is trolled (for tarpon) at a 2 or 3 mile-per-hour speed. (A faster speed—4 or 5 miles per hour—is called for in Gulf Stream fishing).

The angle-hook is attached to a 5-foot length of piano-wire. By means of a swivel, the end of this set-up is affixed to a thin string (fishing-line) of 15-threads strength, 750 feet long. This line is wound tightly on a reel. For its own convenience the reel is mounted upon a bamboo rod. Agate guides, spaced at intervals on the rod, enable the string to slip through so it may quickly, easily and smoothly be unwound and rewound upon the reel. The rod is held by me in a comfortable position.

To prevent my dozing away, enough yardage of the line is loosened from the reel to enable the contraption to be dangled overboard with a lively effect as the craft moves slowly over the water's surface. (Fishing in this manner is called "trolling"). With imitative skill the 60-feet of freed, pulled line makes my contraption act as if it were an active or wounded small fry as it skitters along behind the moving boat.

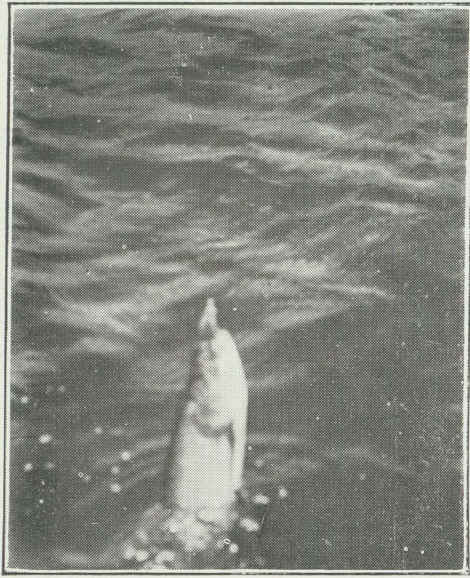
RECONNOITER—Having previously exercised a rite which is our privilege and pleasure on such occasions, we have divested ourselves of wearing apparel. We are "stripped" for action! Nevertheless, we feel fully dressed for our serene requirements.

"While fishing," says an authority, "keep an eye fastened on the fish-bait and the other eye on the future of mankind." So, my companion and I engage in a discussion of the topics of the day. Mentally we wander to distant places in our attempt to arrive at proper solutions for the world's problems. Our minds are completely diverted.

Take heed! Pay special attention to what follows: from the azure depths starts a gamester of the sea. As we leisurely cruise along the moving contraption is followed . . . Ah! the traveling bait proves itself irresistible. . . . the water-citizen becomes fascinated.

The princely swimmer deliberately approaches the lure! He noses it! We can observe him and his motions: an extraordinarily large tribesman, the picture of grace and buoyant life. His color is bright and gay. A high dorsal (back) fin runs midway along the back, with a little tail-like whip affixed behind it, adorning his deep, plump body. His caudal fin is wide, deeply cleft, showing him to be a powerful individual of the surface-feeding type.

ZERO-HOUR—Heretofore our suppressed desires have been a mere, languid interest. Now, having glimpsed this philandering-menace in close proximity to the lure, our mission becomes merged with strong impulses. An unconcealed, dominating craving is now created and intensive effort is made to induce the oceanic-knight to covet the lure. The mighty creature pauses, then dips his handsome torso into the waves and disappears. Thinking, perhaps, he is merely hiding below but still observing it, I jerk the bait with alternating pulls and allow it to sink for brief intervals. It is calculated to arrest his attention.



My skittering artifice proves irresistible . . .
From the azure depths starts a gamester . . .
The water citizen is fascinated . . . He noses
it . . .

“Off this point, Captain Sir, should I be successful in inducing this chiro to snap at my contrivance (lure), another great drama of the seas will here be enacted. It will be referred to as Case No. . . . in angling history,” I remark cheerfully and expectantly.

The skipper is silent, like the clever member of the fish-world. The latter, with supreme indifference plus a mag-

nificent expression of unconcern, its noble brow relaxed, insolently swims after my warbling contraption, but it wisely maintains a safe distance. After several unusually long minutes, as though its inspection of the scene of operations is completed, it apparently departs and is not seen again for some time. Then it reappears on the surface some distance away. This action causes a false impression. It makes me conclude that this fish is disinterested A tantalizing maneuver!

"To tustle with this giant generalissimo of the ocean", reason I to myself, "would be one of the outstanding moments of my angling career". To my guide I complain, "I have traveled far and long to become engaged in the tumult and commotion, the fracas of a feud with this species of sea-dweller." Although my blurbs are audible and register on the skipper's expressionless gaze he pays me scant attention. My companion, too, watches eagerly from the sidelines. The rules of the game keep them quiet. The course of strict neutrality, however, keeps both men alert.

"In spite of their millions of years of existence", think I, "fish politeness has not yet reached that stage of development whereby it shows proper consideration for the angler on the marine fairway."

The oceanic creature proceeds to amuse itself: with instinct and self-assertion it engages in carnivorous pillaging and destruction of fishlets when they come within his edible range. It becomes clear to me, observing this, that this dilatory fish is no gentleman. His cooperation is not a thing to be counted upon. . . . Quietly, the agitator returns . . . and again looks over my bait, as he comes within close proximity to it . . . but he again passes my trembling hoax by . . . It is all so confounding and confusing

"What manner of trickery is this? I shall deem myself forever disgraced if this formidable marine-scout completely ignores the presence of my supple effigy. . . . What an easy victim am I to allow a huge fish-belligerent to work his magic spell upon me thus!" These and similar sobbing thoughts succeed one another in my anxious mind. . . .

My vain desire begins to resolve itself into a pathetic situation. The indifferent attitude on the part of this charming aquatic wanderer is as ignoble as it is unchivalrous. For some unrevealed motive he decides to resume his perplexing antics

in the tropical waters According to the individual whim of this particular fish his piscatorial highness vanishes in the depths whence he came originally. I conclude that something more persuasive is required: so I draw in my contraption, and affix thereto a small piece of red ribbon; then toss it overboard again. Meanwhile the skipper-captain navigates around to the place where the finny creature last "sounded" For some time I await in vain his re-approach.

Incapable of standing the strain longer I determine that my tension shall be eased. Having expectantly and excitedly rushed aboardship my morning meal was spared its consumption. My stomach's apparatus, I calculate, is entitled to reward for its heretofore uncomplaining behaviour. This timely thought is communicated to the ship's mate. That worthy individual darts below deck and returns with drinks and appetizing sandwiches . . . Nonchalantly I reach for a Camel; in the act of lighting it during this instant, my tackle is neglected

Alas! for the brevity of human patience!

SECRET ASSAULT—Once aroused and determined, none of nature's animations is more malicious in purloinings.

During this inopportune moment for me the finny despot chooses to attack!

With ingenuity peculiar to his breed this incorrigible epicure discloses his fiendish character—he makes a rash assault upon and snaps up my innocent contraption!

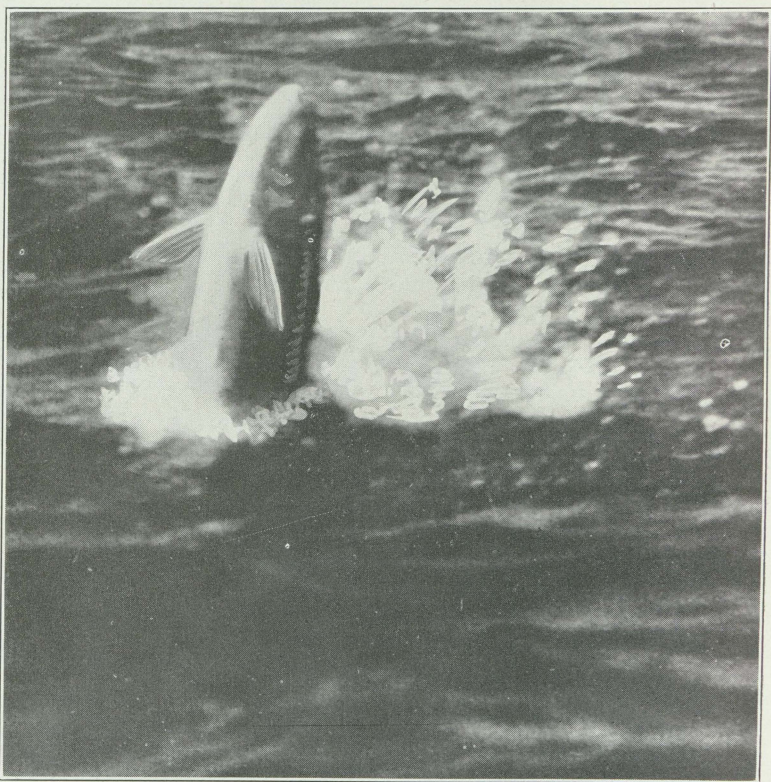
(Because it stands out conspicuously and cannot be erased from my memory I am able to recount the episode.)

With force unbelievable, his cruel jaws extended, the terrific dash at my inoffensive lure is made with lightening-like rapidity—during the moment when I was not completely alert . . . A terrible example of his infidelity! But a sublimely-timed act in battle!

You will note from the above that in the accomplishment of this nefarious, sudden and violent attack the assaulter first diverted my mind and attention. Then, with an unexpected, sledge-hammer blow, artfully timed and delivered he smashed into my contraption.

During what seemed hours (but, perhaps, was accomplished in a limited number of precious moments) my adversary proceeds to tear off additional, uncountable yards of my flimsy string. This second rush is, unquestionably, to show his unlimited strength and great prowess. The incredible doings of this gross violator of my rights may be attributed to some evil power which suddenly possessed him—I shall never be convinced otherwise.

Immediately he resorts to flight with the speed of a submarine torpedo and trickery. To further deceive me his aquatic stunts are concocted with ease and unnaturalness. His actions now resemble those of a circus performer. He is in the air! More is expressed by the silvery part of his body (where the



... "with force unbelievable, and cruel jaws extended, he makes a terrific dash at my little inoffensive contraption. Plainly his object is to commit criminal assault, even murder itself.

hips might be, if he had any) than by an oriental dancer at a side-show!

The elegant form as well as the dubious character of the fish is thus exposed! What oceanic force is symbolized by such exploits! Such craftiness and complacency!

OVER THE TOP—To the angler this initial attack is a supreme moment. It forms an epoch in the life of all devout fishermen.

Fortunately, I turn from my partially devoured repast in time to observe this sudden, fleeing movement. Before my surprised mind can grasp the enormity of this sinner's offense and my hands manipulate the rod and reel this base fellow, with characteristic guile and strategy, departs and takes with him the ill-gotten gain—my contraption! The guttersnipe rushes off in great haste in his formidable efforts to avoid arrest. He makes it appear that he has urgent business in mid-air or mid-ocean.

My reel sings musically. It burns from the painful heat created by the fast disappearing line torn from the reel in pursuit of the absconder. My string attachment follows the undaunted culprit into its sanctuary.

My own existence becomes jeopardized through my feeble attempts to stop these rushes, to halt or control the all-powerful fish's movements. Realizing the seriousness of his act, which is punishable by death, the infuriated criminal continues his dynamic flight. Scant attention is paid to my endeavors, with the help of my tackle, to apprehend him. Because I innocently touch the line to which my contraption is connected my fingers become severely burned before I can remove them. Therefore, I merely cling desperately to the butt, which forms the business end of my tackle, upon which the heated reel holding the taut line is seated. To express it mildly, the situation is tense.

Upon finding himself attached to the angle-hook end of my contrivance this key-twister bounces out of the fathomless waste. His tail serves the purpose of a mammoth steel spring. In less than a split second the purloiner, with a powerful hurl upwards, its force driving him into space, appears in the atmospheric region—head swinging, body twisting, tail dancing, fins spread out! The ascent seems endless. A super-human, magnificent and stirring exhibit!



—Jerome Fugate

WHAT MANNER OF TARPON TRICKERY IS THIS?

The nautical sorcerer splashes out of the depths, hurling its bulky form skyward repeatedly. If unsuccessful in "throwing" the tormenting hook, which is usually the case, he strips a hundred feet of precious line from the reel in magnificent sprints, then sinks into the sunless fathoms. . .

The elephantine bulk, now almost completely exposed, gives off a sinister appearance—or is it the sneering smile of expectant victory? All this is calculated to, and usually does throw the astonished angler completely off guard. It furnishes a new slant to the despot's pretense and defiance.

On a similar occasion an inexperienced cameraman was assigned to secure motion pictures of the aeronautic performances of this fish species. The man became so thrilled, excited and bewildered that he overlooked his mission—he neglected to turn the crank of the photographic machine!

But in big game fishing such as this, unusual circumstances warrant appropriate measures being resorted to. As the full extent of the hostile one's deed dawns upon me I thoughtfully plan his capture, which is my solemn duty and mission. Being by nature a tolerant and gentle individual, neither rash nor hasty, my reasoning powers, at the outset, had become

partially paralyzed. This accounts for the somewhat lateness of my decision and determination.

The view of his pompous, silvery body dashing along in high gear, without visible means of locomotion, causes me to assert loudly, "The contraption is my rightful property and I shall regain it notwithstanding the utter confusion prevailing in the ocean and aboardship".

To justify my conscience I have satisfied myself on these moot questions:

"Has not this aquatic dweller, by his own overt acts, added insult to injury? Does it not prove him cold-blooded and calculating? Is he not possessed of the very devil of foul intent? Was it not this scaly hi-jacker's object to commit criminal assault, even murder itself, upon my imitation fingerling?"

May I ask, therefore,

"Is it my fault that this marauder of the deep became ensnared by my faithful angle-hook while he was in the very act of putting his ruthless intention into execution? Is it not clearly proven that he—not I—is the aggressor?"

Ah! you sly, watery criminal! You who eats his neighbors' (and even his own) babies! You, whose gluttonous appetite may yet be your own undoing! I warn you! Beware! Beware!

Ignoring my utter helplessness the felon repeats a series of stunts with perfect showmanship and self-esteem. His explosive strength is loosed without a discordant sound. My steel-splinter has forced itself into his lower lip—a perfect strike—which enables him to close his mouth without losing an ounce of his amazing fighting ability.

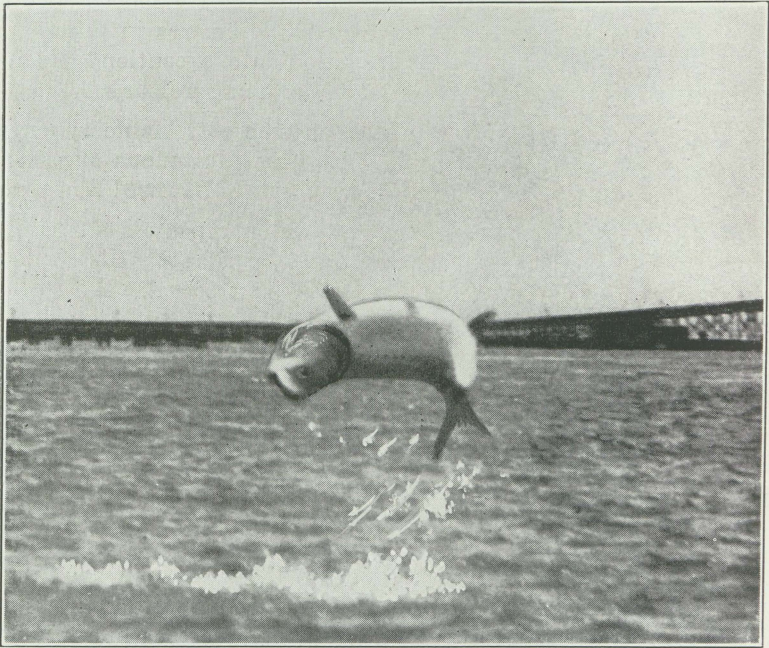
He springs, pulls, jumps, twirls, hops and shakes! Seven times in rapid succession he invades the space where clouds form—a world's non-stop fish-record! He leaps, rodeo-like, tap-dancing on the sea and above it, on his head and tail, at one and the same time! Such grand leaps would do credit to the "man on the flying-trapeze"! He resembles an immense bar of molten silver circumgyrating skyward and then transforming itself into one of those grotesque creatures which we meet in nightmares. Each time he touches the surface he beats it with his fins as though he is determined to knock a hole in the blue ocean, churning up the adjacent waters in

all directions. In all this nerve-shattering hub-bub he is careless of his own safety—always plump and beaming!

My rod groans as it bends nearly double with abdominal pains. I am a trifle relieved to see the male-wench level off and with a flop dive deep into his watery retreat—and remain there—like a disaster going somewhere to happen.

Man's conception of the scheme of things never intended these confusing barrages to be a part . . .

BATTLE HEAT—In modern warfare (I recall to mind) the primary objective is to harass the enemy. This my merciless foe has done. He has employed various tactics. His long, hectic rushes—towards nowhere in particular with alternate descents into his unknown sanctum, coupled with surprising and spectacular feats above the water's surface—all have not been without effect upon this devout angler.



—Jerome Fugate

What is more supernatural than a huge marine-dweller oscillating in air, as though it has sprouted wings . . . transforming itself into one of those grotesque creatures we meet in nightmares?

That gamefishes continuously employ cunning and tricks—the desired elements in warfare, on land as well as sea—is proven. Few of their jaunty performances are alike. Sometimes they accomplish near-miracles. They delight, tease, amuse and aggravate the angler at one and the same time. Their passion for surplus exertion is unlimited, apparently. And this buccaneer's every act evidences his unlimited capacity and unspent strength. His frequent and frenzied changes in place and position are made with indescribable grace of movement, maniacal and enraged though they appear to the onlookers!

The one-sided battle is continued by the undersea denizen's splashing, jumping, twisting, tumbling, plunging and pulling with athletic spins. Following these he returns to the sunless retreat, fathoms below, with line aplenty. There he hunches himself, to gather additional strength and added momentum. When he reappears on the surface it is a great distance away from where he last disappeared, preceeded by one of those long, torturing runs before submerging again into the unknown. At times his stay in the marine abyss seems like an endless period. Each time he comes up the silvery mass sways to and fro, see-saw like, rotating backwards, forwards and sideways, some ten or more feet above his salt-sea home, lashing the waters with increasing fury—tearing off more and more of my precious string. Thus far I have been able to regain only an insignificant few feet of this valuable attachment. The sea breaks perhaps a hundred feet in circumference as he sounds with the heaviness of a nervous whale.

My rod quivers with intense pain. The violent spasms cause it to double in the middle region; it bends, dances and wobbles with the rythm of the hard jolting, jarring, jerking gymnastics as the sea-gladiator's atrocities continue with the regularity of a fast express train and the stubbornness of a Georgia mule. Every act of the tackle-wrecker registers in the rod's tip. Its pleading, urgent message for relief is felt in my firm hand-grip on the butt of the rod. Every beat of the fish's heart is felt, clearly and distinctly

The general effect is as though several artilley batteries are firing and recoiling in rapid succession in the great oceanic expanse during a command to "fire at will"

There ought to be a law

Normally, such reckless abandon would delight and entertain me, were I a mere spectator (like my companion and skipper-guide). Even in my capacity as manipulator of the rod and reel the dramatic sights have kept me more or less inactive. Whether this is due to the instinctive fear which is man's heritage, or to the double-action, high-speed capacity of this fish—which he reserves until such occasions, and then displays—is still a moot question. . . .

I am bewitched by the arch-thief's alertness as he moves from the scene of trouble. . . .

BATTLE THOUGHTS—"What if my line should snap? Will my expensive rod be smashed on the boat's bow? Or will it burst from undue strain and punishment? Such cynical backwater tactics, if continued, will surely cause my string to part company from itself.

"This overgrown sea-bully has had his own way for a hundred or more years—undisputed! Each year he has grown, so he now evidently weighs several hundred pounds His actions convince me that he is a maniac-depressive. His physical strength and mental excitement blend him into the gloom of melancholy

"In company with 'Deacon Naple' of Rome I have actually viewed with horror a tarpon isolate itself by jumping into a mangrove tree in his desperation. Since it stubbornly resisted all efforts to bring it down the suicidal fish was left there to die, alone, mourned only by the angler.

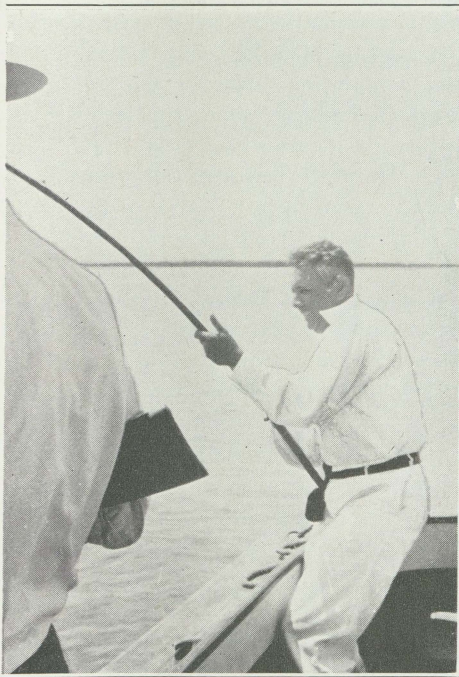
"This self-asserting transgressor will yank me overboard—if the idea dawns upon him. Has he not proved himself fully capable of such foul play?

"Follow the rules of sportsmanship. What you get out of the game-fishing sport depends upon what methods you use to play it. Get all the thrills there are. Be aggressive; but don't pull or yank your fish by mere strength. Be fair. Treat the watery opponent with due consideration. Use your head, your eyes, your hands—that's why they were given to you. Study your assailant; learn all about him, his life-habits, functions, vital activities, conditions, conduct under varying circumstances, classes and types, tactics, points of strength and weakness. Be alert—never let the fish get the surprise jump on you. Keep everlastingly on the job. Never lose

your self-control, self-confidence or self-respect. When the tide of battle goes against you set your jaw. Never stop fighting. Keep battling with all your strength. Keep your head up and keep it cool. A quitter never wins and a winner never quits.

"All good advice. But it can be taken two ways—by the gamefish and the angler. Would that the author of these admonitions were here in the flesh—this very moment—to prove how anyone can, under these circumstances, do otherwise!

"Why does man try to master a provoking oceanic monster which rises and rushes bewitchingly into the stratosphere at



his own pleasure, squirms and revolves there, then sounds for indefinite periods like a squat leviathan?

What does he view in the scenery a dozen feet above the water level? Why does he exhibit those fearful distortions before returning to his own element?

"Seemingly, were a large building in the path of this frenzied debaucher he would leap over it with ease.

"Under his sinister influence and guidance even my line is turning traitor. It feels its duty is to flee with this lawless waylayer.

The string follows him with his every onslaught, paying no at-

The acrobatic doings of some aquatic prey are sufficient to turn the angler's hair white, to make it stand on end . . . My quivering wand suffers intense pain; the assassin's every move registers in my frail rod's tip. Each beat of its heart is clearly and distinctly felt. . .

tention whatsoever to my frantic efforts to restore it to its accustomed snugness on my reel.

"The wear and tear is telling on me. Two hundred years ago David Hume—a clergyman—defined a miracle: 'A direct violation of the laws of nature.' Here we have a living example. The mysterious notions and actions of this foul-mouthed demon are unsolved.

"Are not we in the presence of greatness? What is more supernatural than a huge marine dweller oscillating in air, swaying back and forth as though it has sprouted wings?"

This varied assortment of ideas comes and goes in my thought factory. Meanwhile, the sea beast performs a new series of miracles in rapid succession.

NEAR TRAGEDY—At this particular stage of operations a dire calamity takes place: as the bloodless battle rages the skipper-captain watches the commotion intently with a sympathetic stare. At my signal (a nod by me to the left or the right) that alert individual comprehends—he succeeds in turning the boat at right-angles. We move towards the general direction of the fleeing desperado, who is now off on a jumping spree like a kangaroo. Seeing us, he returns to his invisible haunts below and remains there so long I conjecture reinforcements are being gathered while he gets second wind. Behind him is a ton of spray.

"Why does he allow me the privilege of nearly overtaking him now? I will take full advantage of the unusual situation, replacing a considerable portion of my misspent line upon its accustomed part of the reel." This permits me to breathe easier. "Could this process be continued but a short time longer it will put me directly over my immersed contestant; but were that done, it might put my attacker in position to catch the line-connection in the boat's propeller. Further havoc would then result."

Realizing the motive behind this shrewd tactic on the fish-conjuror's part (if that be a true diagnosis) I direct that the yacht be reversed. With consideration and judgment befitting an experienced deep-sea angler quite a few yards distance are now left between our conveyance and the swash-buckling dragon But the venerate free-lance of the high seas purposely misinterprets my benevolent purpose.

The fish-general springs up from the sea. This time he displays unbelievable reserves of vitality. In effect it appears that a thou-

sands coiled springs suddenly released their combined pressure beneath his carcass. He comes out like a shell exploded from a high-powered, anti-aircraft gun. Faster than a burning shot his flying body tears through the upper regions and scorches it. Bloody defiance shines in his pinkish eyes as he sails in too-close proximity to my tired and aching body. Momentarily I await the dreaded, almost certain happening—to be violently hurdled waterward from my fishing perch. With warranted impulse, however, I dodge exactly at this moment—otherwise this story might not be related by me. I dread to comprehend the possible ending—with barracuda and man-eating sharks awaiting anything edible that finds itself overboard. It was these fiends (sharks) which caused the fish to rush heavenward with great dispatch. What a satisfying meal we both (fish and angler) would make these cannibals—a gruesome thought!

Whisking by with horrible force, that part of my anatomy commonly referred to as the head remains intact and attached to its preferred position above the shoulders and neck by the smallest degree of an inch Whether purposely or otherwise, the murderous intent to send me to an untimely and ghastly ending fails. The guilty felon bounds over the mighty main and disappears entirely from view And, to add to my utter misery and distress he yanks off more of my delicate line than was stripped from the reel in all his previous rushes. Behind him is a ruinous trail marked with sea-foam whipped up by this latest flight.

This new proof of his foul, murderous intent and overpowering ability causes my pride to drown itself in perspiration. My attack of the "miseries" becomes acute. As Shakespeare puts it,

"Meagre were his looks. Sharp misery had worn him to
the bone."
—Romeo and Juliet, Act 5.

Unable to fall to my knees in humble prayer—lest my tackle meet with disaster—I glance at my reel with morbid interest. My heart sinks when a mere handfull of feet of line meets my pitiful gaze. I beg the favorite god of anglers for a miracle to quickly favor me; for my tackle to hold long enough to enable me to remove this deranged viking-fish from his accustomed circulation. The solitude is profaned with a flow of blasphemy that would make his piscatorial highness, Ernest Hemingway, envious.

TIME—And so the most miserable hour of my big-gamefish angling career (since then it has proven to be the happiest and most memorable) becomes history. The valiant sea-serpent, however, does not give the least sign of relinquishing my contraption which he purloined while my back was turned for an instant. Neither side relents. The battle continues as the sun sets.

Thus far the torture-period is much in the would-be-murderer's favor. Instinct, his ally and confederate, communicates this to him. It inspires him to fresh criminal flights, new somersaults and air feats, repeated plunges with head foremost into the bottomless marine pit. In most things he has succeeded remarkably well. He has violated all the rules of ballast and battle. The dictates of gravity, speed and aquatic life have been outrageously ignored. His transgressions are many. His independent spirit is unbroken. He has proved himself absolutely devoid of all principles of sportsmanship. For me he harbors ill-will and has indicated utter contempt for the human element. He has introduced into battle new strategy bordering on extreme ravishment and a host of other crimes too numerous to mention in this indictment.

For my own part the taunting sprees have worn so heavily upon my nerves and senses that my mental equilibrium is strangely affected. All my resolves to put into execution a definite plan of action have entirely vanished. My energy is almost expended. I am barely capable of hanging on to the business-end of my precious tackle. My heroic efforts to capture the thief in fish-clothing have had but little effect upon this truant wayfarer-pirate. Am I to understand from his contempt for the angler that he has concluded a rank amateur fisherman insulted his autocratic dignity?

The jury is still out

VICTORY CHANGES SIDES—A Chinese general, to encourage his soldiers when pressed in a murderous campaign, remarked:

"As the tides change, so does victory".

—Memory Plays an old Tune—Cook.

The unusual happenings during the second hour will live long in my memory. For example, at one point in the terrific struggle tears visit my eyes when I beg for assistance. But

the skipper-captain and my consort refuse to leave their positions of observation and come to my relief.

He who has not experienced it cannot get even a slight measure of appreciation of the thrill of the marine drama from the few flashes of separate scenes here recounted. Numerous times the convulsive movements, smashing blows and leaps and dives of this torturer nearly destroy both me and my tackle. . . . Those violent aches in my mid-region are recurring; and my nerve system gives notice that it may give up the struggle momentarily . . . The hours of hectic, downward, sideward, upward atmospheric and alternately plunging tactics of this finny-demon are truly dreadful to behold. The full measure of my predicament can only be understood when one is similarly engaged.

It brings up for attention the unwritten law of the sea (for fishermen exclusively):

"An angler who suffers his line or rod to burst in a fish-engagement emerges vanquished. He loses both equipment and chiro. He brings upon the fraternity shame and disgrace. Forever afterwards his conscience may prick and annoy him."

In spite of these severe dictatorial regulations such instances are not uncommon—as the author regretfully testifies from past events. The invisible umpire awards the decision to the crusader of the deep whenever the tackle fails to resist the havoc—this to the angler's intense agony (and expense) . . .

So far, in this battle my rod has proven itself capable of taking punishment. It is useless, I concluded, to continue to risk this wonderful bamboo, which took years to "cure", on a desperate, shark-chased, underwater fugitive which acts like Oceanic Enemy No. 1. All this is offered aloud, in monologue fashion. Neither comfort nor inspiration is forthcoming from my witnesses. They gaze with mute anxiety out at sea. Like them I crave a position on the sidelines to secure much-needed rest. There is a second wind in sea-angling, desired alike by fish and fisherman. If the latter gets it my work will be all in vain. So, by sheer determination I try and re-wind my severely taxed linen fibre. Some 400 feet of it remains between the well-shaped head of the oceanic scavenger and my rod-tip. This distance has been steadily maintained for some time.

Towards the end of another hour the boat's motor is started up and several nautical miles are covered. By stellar stratagems the libertine cruises along, stealing a free ride. So, my crafty one! Must I also resort to deceit and foul play to bring you alongside? That seems to be the only possible solution.

When I am assured my fish-foe has accustomed itself to the speed of the aqua-plane effect I direct my navigator to slow down as gradually as possible. As this is accomplished I reel in the line with all my remaining strength: it keeps the fish moving towards the boat at its heretofore 4-mile per hour speed. In this manner more and more of my misspent yardage is surrendered. My hopes revive for the early capture of my enemy.

COMPLEX ACTIONS—Were this particular violator of my rights endowed with human understanding, I could explain to him that purely for pastime and sport I perform the sacred rites of deep-sea angling. I would tell him that he will be allowed to move about freely in his accustomed habitat just as soon as he could be forced to release the contraption which he has stolen. Moreover, I would agree to be gentle in the operation of removing the steel-splinter (hook) from the slimy jaw and carefully return him to Fishville. Perhaps, even his criminal acts might be overlooked—after his net weight and exact length were recorded—provided, of course, he measures well up to expectations. Otherwise, my disappointment in this, added to my already overwrought condition, might be disastrous to him.

Sad to relate, no such reasoning process is possible with one so unintelligent and untrustworthy as a robber-fish, even when held prisoner. In sorrow, therefore, rather than anger, my over-enthusiasm grows. Regardless of what fish-excuse may be offered, I am now determined it shall be rejected. His pleas will avail him naught. Since he is beyond the process of comprehending must he not be prepared to suffer the consequences—even as I have been compelled to do—if I can get him where my purpose can be put into effect? While I will temper my action with justice and mercy, no definite promise of future action can be made. "On what strange stuff ambition feeds."

As more and more line is regained by me and restored on the reel I visualize this prisoner brought before the bar of angling justice. I can almost look upon my captive, whose belly is upturned as he nears the craft. Like humans who flee from

justice this fellow, too, looks haggard and worn from the long ordeal. Taking hope from this turn in events my self-assurance begins to return. Optimistically I expect the end of the struggle—in my favor—to be but a matter of minutes. An optimist, it is said, is someone who does not know what is coming to him. The temptation is too great not to offer my companion and skipper-guide some timely advice:

“The first lesson of a devout sea-angler, sirs, is never to lose hope. Don’t be embittered when the tide of battle with a gigantic fish goes against you. Those who become discouraged easily or disgruntled at being worsted in wearysome struggle have no place here. They are as much out of place as a man with his elbows sticking out in a crowded subway. Their careers end just when they should begin From Poor Richard’s Almanac we learn that “they who will not be counseled cannot be helped.” It says that “experience keeps a dear school, but fools learn in no other—and scarcely in that.”

“With patient inattention hear him prate”—Meredith.

These quotations cause me to look squarely in the direction of my spectators instead of at the fish. The expression of my companion is that of a pocket-book with nothing in it. My philosophy, I assume, may be wasted, but I will try again:

“Every act is not without its own reward,” says another philosopher . . . The remainder of this is never expressed, for the skipper’s action causes me to cast my eyes and mind seaward where, during this brief interlude of hard-won, hopeful mental condition, a most violent commotion is taking place. Naturally, I am unprepared for what is happening: the heckler has hoodwinked me into believing that he was ready to give up. I find that my trust in him—like that bestowed on other apprehended-fugitives—is not warranted. In the distance, more than a hundred yards away, poised on end, the waves breaking all around him, is my almost captive fish. This maneuver is accompanied by all the mixed elements of trickery, hypnotic spell upon me, disorder and excitement blended into one. Under the circumstances this tyrant’s eloquent dash for liberty causes my fury to return, and it reaches new levels.

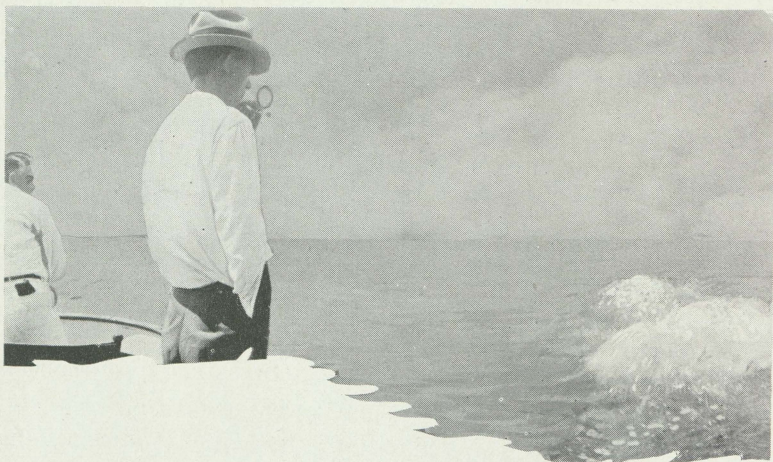
My wrath knows no bounds. My heart beats in cadence, staccato-like, with the force of a parade-drum. My wild-eyed sight grows dim. My bones feel as though they may crack any

second. My breath becomes spent. My back and limbs, especially my arms, are nearly lifeless. I am on the verge of collapse as I tremble, inwardly and outwardly, from head to toe. My voice is sepulchral. I am unable to speak my thoughts, one of which is to jump in after this despot and engage him in Ethiopian manner. My face is hot and flushed. Could I but get to him I would render him ineffective with my "persuader"

* * * * *

Each moment is precious. The continual sinister hissing of the reel brings me out of my stupor. To the observant guide I yell at the top of my lungs to turn the boat so we can chase the recreant bandit. Even with this assistance the taking up of my line is accompanied by great strain. As we nearly overtake the vagabond I give way to muttering unprintable, select, venomous ravings between long, gasping breaths.

Did someone aboard gurgle a mild twitter? Or was it sarcastic comment? Am I being ridiculed? Or is it merely fanciful imagination? This is neither time nor place for malicious heckling and derision—but whatever it is, the matter will have to be held in abeyance. Just now my undivided time and attention must be given to my rightful duty. My eyes are riveted upon the spot in the ocean where my tackle is be-



. . . . Behind him is a ton of spray My chatter and babblings are ignored by both fish and friend. Grady, my skipper guide, gazes silently in the direction of the fleeing desperado as if to champion the rights of the fish, without fear and without reproach. My utter helplessness is completely ignored. . .

ing swallowed up by the engulfing waves. I am firmly convinced that the escaping evil-doer is headed for the "second buoy" which Broward pointed out to me once, in the vicinity of Rebecca Light—over quicksands, in the treacherous straits.

"One cannot philosophize with a wild, unknown thing which tugs, tears and batters with such force as to tear limb from socket" explained that distinguished, devout angler, the late Dr. Charles F. Holder. "This bizarre sport requires the highest degree of swiftness of thought and skilfull application". . . .

"I must resort to a combination of angling tactics. It is time for this private war to terminate. The fish-general has engaged all his forces to deceive and overcome me. He has harassed and tortured me until actual peril may result—paramount battle requirements, to be sure."

My patience, like my string, is at the breaking point. I am no more the calm, peaceful, undisturbed person heretofore described. From the fearless, restive sportsman of three hours previous I have degenerated into a wretched, deplorable, confounded invalid. The continuous, unceasing, aggravating shifting and straining which I have been forced to endure, because of the actions of this depraved being from the fish-underworld, causes me to heave, swear, become irrational and grudge-bearing. My condition is not describable. With deep chagrin I mutter a new series of unprintable resentments. My ravings take on a fine edge. But the scornful ultimatum merely floats away on the endless waters, helped along by the trade winds.

The sun itself, formerly so enjoyable, has now joined forces with mine foe. Cold drops of perspiration form on my sweaty brow and draining body. I become delirious! My torment and discomfort are unbearable. My fatigue is so great that it causes my mind to give way to strange forebodings and misgivings. I conceive a picture of a man holding a steaming and smoking apparatus! My imagination conjures up a burning body (my own) struggling to release itself from bondage! I long to jump into the invigorating serum—(the man wants to change places with the fish)—to cool off!

UNTIMELY REQUEST—My heretofore silent (but observant) crony sits nearby and senses my condition. He scrutinizes me intently and regards my futile efforts to wind and rewind the string on my reel. Helpless as he is to interfere in my behalf, the situation arouses him, finally, to ex-

pression. I inform you in secrecy of this, for it is a sad and extraordinary experience. It occurred during the latter part of this encounter, just as I had reached the bottom rung of disgrace when, in a fit of stupor—due to my exhaustion—I threatened to throw the rod, reel and all after the marine hexopod and admit defeat. My prayers, profusely primed with choice expressions admirably suited to the occasion, became loud and audible. In the midst of this, when I am beside myself with rage, and in my deplorable mental and physical condition, my friend is seized by an overpowering impulse:

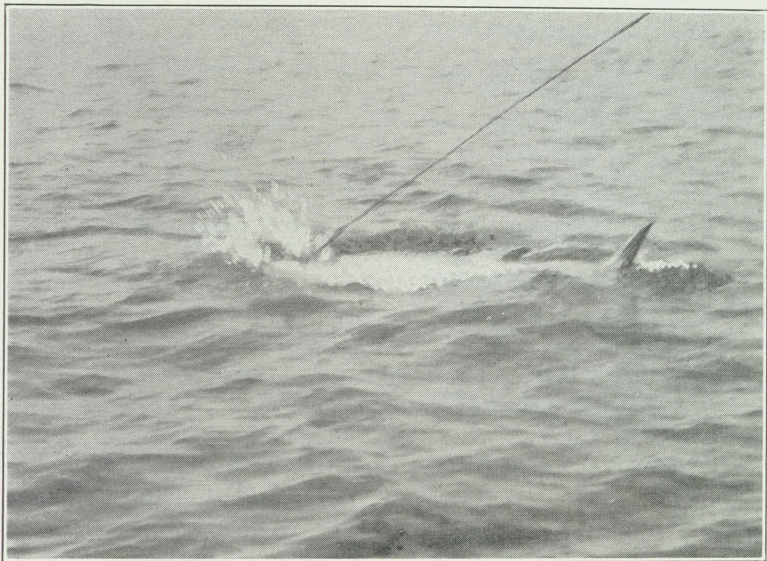
Frankishly, he asks me for *the loan of a match!* Without even attempting to comply with this most unreasonably-timed request, this insolent distraction, I warn him that the interruption will not soon be forgotten and never forgiven, and include additional admonitions to emphasize the force of my retort.

After lapse of time has put its healing effect upon the tragic occurrence it is now possible to admit that I touched a deeper degree of infamy, perhaps, than at any time demonstrated by the seagoing robber. My sympathetic and lovable companion, my angling buddy and friend, claims (with some semblance of truth) that I rudely denounced him along with the fish

But all to no avail! Observe! my chatter and babble are ignored by both foe and friend! My benumbed companion resumes his seat at the observation post while the infuriated marine gangster and I continue to assail each other with our last supreme efforts until, after what seems to be an indefinite period of time, the fish, like me, becomes completely exhausted.

He, too, has become convinced of the futility of further struggle. His tremendous store of energy is spent. His tussling and frequent changes of position cease. The knave's activities subside. His lofty tumbles cease. Aha! No more skylarking! He turns on his silvery stomach. The line slackens. The fish sign of surrender!

FISH'S FINIS—I release another verbal denouncement before accomplishing my mission. "So! my wretched opponent, you are surprised, finally, to learn that my contraption—which you hoped to make an easy conquest of—has remained equally as strong as yourself!"



THE FISH SIGN OF SURRENDER!

He, too, has become convinced of the futility of further struggle . . . His tussling and frequent changes of position cease. No more skylarking and lofty tumbles . . . The knave's boundless store of energy is spent . . . My line slackens . . . He turns on his argentine stomach, the fish sign of surrender!

Quickly taking advantage of his complete paralysis, through exhaustion, with the little strength remaining at my command I drag the libertine, somewhat loath, to the boat. He flips a final spray into my face . . . By way of assistance my skipper-guide now comes closeby and suggests that "one more heave and he will be in." The fish attends its own funeral procession!

Knowledge, it is said, is more than equivalent to force. This thought has sustained me. With technique born of faithful performance the unwilling master kleptomaniac is brought alongside. He is permitted a final splash or two, after which the mate hauls the reprobate fish-warrior aboardship. As his huge form quivers on deck I fall beside it, unable to rise. Both the human and the fish forms are outstretched on the boat—in status quo. Those present view the final rites.

* * * * *

Later, when I am able to rise, my first glance at the piscatorial corpse enchants me. I become thrilled and entranced at its magnificent proportions. But, realizing his hypnotic powers, his many transgressions and sinfulness, his racketeering impresses itself upon my outraged spirit.

I am about to release him from his cable-tow (landing hook and rope) so that the depravity of his offenses may be met with proper severity of punishment. Personal considerations are put aside. His debt to nature must be paid, otherwise he may unleash his trickery and maniacal efforts with destructive force upon other victims.

Reluctantly, then, with dignity and poise suited to the ceremony, I give Mr. Gamefish one effective rap or wallop on his "beam" or middle part of his forehead . . . This is neatly accomplished with the instrument previously described as a persuader." For such purposes this messenger of fish-death is carried on these voyages. It enables the angler to properly "comfort" the oceanic pillager—without simultaneously knocking a hole in the bottom of the boat (if the fish moves his head too suddenly from the exact spot where the impact of the blow falls at a precise moment). Properly accomplished a fish's conscience thereafter bothers him not in the least.

Thus the desperado of the high seas meets his end! He makes a dramatic exit. He is bereft of life and removed from this world. His race is run. His doom is sealed. The breath is out of his body. Upon himself he expels his own slimy embalming fluid from the opening near his anal fin. For him no more carnage and destruction. His sovereignty of the seas is over! He is launched into eternity. His soul is returned to its Giver, and he goes through the pearly gates—or, in his particular case, to an eternally hot—not wet—domain. His body is mine to dispose of as I deem advisable. He is allowed to slide offside into unknown ports at the ocean's bottom in the manner of all whose lives are extinguished while aboard a vessel at sea. On the way down, perhaps, his body will furnish banquet material for his former cronies or shark enemies.

The fish-general dies in battle! In his honor the ship's colors are lowered half-staff up.

DEFENSE RESTS—In his "Letters", Pliny the Younger, expressed our feelings exactly: "An object in possession seldom retains the same charm that it had in pursuit."

As is customary, the skipper-captain now vents his mind. He rattles off an appropriate obituary for the scaly one (which we are unable to repeat here because it would not be understood not appreciated by some). It is accompanied by choice remarks from me The mourners aboardship

resume their tasks: more tackle is prepared for ensnaring another condemned fish—criminal while pent-up emotions are given full play . . .

In further evidence, let me submit the fact that an inspection of this plunderer's vitals, especially his distended stomach, made prior to his funeral ceremony reveals the true, base character of this depraved being: upon opening him up the mate finds that he had consumed the smaller of his own kind, as well as his own nephews and nieces, and even his own little children (when he could catch them).

Was he not, therefore, a dangerous enemy to small fish-orphans? Did he not merit swift and absolute extinction? Did I not, by my abolishment of this demonic-monster fish, relieve the smaller fry of their apprehension? Instead of condemnation for my daring conquest, should not praise and credit be my lot? Whereas his intent was to cause me to be bewitched by his exploits and by his elegant form and proportions, should I not be handsomely decorated by the Anglers Society for not succumbing to this sentimental influence? Have I not ventured here without the benefit of observing crowds yelling themselves hoarse while watching the action they themselves need? Finally, did not elevated purpose and charitable intention guide me in apprehending and sentencing him to a timely death?

My cause is left to your tolerant and benovelent decision.





HIS AUTOCRATIC MAJESTY—THE MIGHTY "SILVER-KING"

Brilliantly silvered scales, 2 to 3 inches in diameter, adorn the ichthyolite's enormous sides and belly. Its tremendous head is equipped with huge, bony jaws and mouth.

CHAPTER TEN

Tarpon Fishing as My Guide Tells It

A few yeahs 'fore dis d'presshun en bankin' trubble
(Ise 'most 'fraid ter tell dis—'less yer bin tarpon fishin' yer
mit'n unnerstan) 'Twuz undah de lite uv a June moon—
honorin' Uncle Mose buthday—in de Ten Thousan' Ilunds
Twuz "Pregnunt Pass" ter be 'xactin, where 'siderable tide ebbs
en surges when der moon's full. De moon wuz silberin de watahs.
Dere wuz de noisy "pluff" er some risin' "Silver Kings". Cud
a'hear 'em tarpuns slappin' de watuh all 'round frum "Shark
Point" ter "Panthur Key". Dey wuz dere holdin' er con-
venshun er sumthin'. On der sides uv us, below, en everwhar
'roun dem piskyturul enfurnul masheens sho' wuz plentiful.

. . . . Wal' sir, I wuz jes shivern' all over wid 'citement,
jess couldn' help myself.

In jes a minit er two Grady Lopez (my skipper-guide), 'n Joe
(his brother) kep on sayin' fur me ter git ready, . . . ter git
fix'd en let um have it hardn'n ennythin'.

De fust four strikes wuz jes samples, I rekun, 'cause dem
tarpuns turn loose too sudden-lak ter follow 'instrucshuns
Den, my fren', it happ'nd, sho's yer bawn Yes sir, all
Hell jus natu'lly en complet'ly bustid loose, quick'n yer hears
me tell.

. . . . Rekin as how de restin' up we did most de day dun
me some good, enyhow, cause when I sock'd it to 'im 'twuz
hard'n 'er shot from er cannum on Uncle Sam's cruzzers
fae' is I don' unnerstan' myself jes how I done it 'cept'n de
hook it sunk unto his bony jaw en stay'd thar pow'rful lak.
Joe sez, "yer got im; now hold im!"

ZZZZZZ . . . ZZZZZZ SSSSSZZZZZZSSSSZZZZZZ, VVVVVV
ZZZZZZZZ SSSSSZZZZZZZZSSSSS
. sung de reel! "Ha dawg", busts loose Joe, "that's
de gran' pappy uv em all". Den he jumps 'round lak he's on
fire!

Wal, sir, felt lak I hed tech'd off a depth boom lak them big
undah-watah burtha's whut cum out'en de watuh in de Wurd

(NOTE. The constant "singing" or buzzing of the reel is indicated by a series of Z's and S's).

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War, 'cept'n dis wuz heaps wurse! I'm tellin' yer t'aint nuthin' lak it ennywhar. . . .

Ain't go'ner bodder yer wid too much tellin' but ize er-summin' yer wanna fine out 'bout dis pesky critter thet cuts up lak them 'raybun nites scorpins whut we read 'bout in books.

. . . So, whin he furst 'plash'd out'n his retrete, he cum up so fury-yus en high in de air—all spatter'd over wid silver—er twistin' en er splash'n, jess er shakin' same's he had spells 'n convulshuns Durn'd ef he didn' look lak er fast frate-train spillin' it-seff in a lump 'way up that, whurl-in' round in de air!

ZZZZZ SSSS ZZZZ ZZZZZZZZZZZZZZZZZZZZZ
 Look lak he wuz gonna stay up thar en keep on repete'n dese capers ZZZZZZZZZZZZZZZZZZZZZ
 ZZZZZZCVSSSSZZZZZZ Ef I wuzn' gittin rite nauz'yated this lunitik wud er 'muse me rite smaht
 ZZZZZZZZZZZZX But yer unnerstan' twuz me er hangin' on t'thother end Made my goose-flesh stan' out. . . .
 ZZZZZZZZZZZZ XXZSSSSSSSS ZZZZZZ
 ZZZZ. De clamy purspurashun wuz cummin' on me, en mah ahms wuz feelin' numm Plain fac' is dat quit'n wuz whut I wanted ter do most, 'cause I 'spected whut wuz a-commin'

. . . . En Joe Lopez, he jes kep yellin' for me ter jerk de debbil's haid off'n im, . . . which I tries most awful ter 'comp-lish . . . but dis tormentin' gintlemun frum hell jes slams his-self back ento de watuh, lak a city buildin' fell ento it; so much splashin' hit it 'peared lak twuz er cloud-bust, wid a-plenny a-thundah! "Whut a life", "Whut er life", Joe keeps hollerin' ZZZZZZZZZZZZ SSSZZZZSSSSZZZZZZZZZZZZZ
 Z O En all de whil' dis fish he kep' me movin' roun' de bote ter hang onter diz puzzle-headed watah-giant ZZZZZZZZZ ZZZZZZ SSSS ZZZZZ

* * * *

. . . . ZZZZZZ . . Thet naw-zahtin' feelin wuz gettin' wurse But I didn' ask fer no quarter en Mistuh Tarpum he ain't giv nune. 'Cause most soon es he com up a'gin ter de top, he jess flops sideways en off fer Mexico en such pahts (en, y'unnerstan', I'm still hangin' onter him fer dere life

Just is able ter, too) While Joe, he keeps hollerin' ter "hold im" seems 's' if Joe couldn' think er nothin' else ZZZZZZZZZZZZZ

I'm tryin' ter use mah haid, but it didn' do no good I feels lak dis arm sho is goin'er part kumpiny frum my body enny minit, en I cain't think er nothin' 'cept'n dis pain I sho does feel bad 'en incompleat ZZZZZZZZ ZZZZZZ SSSSSSS A-fore I knows it de durn'd fool duz more jazz steps—twinty feet up in de sky—lak er flappah et er charity bawl; den he dis'pears below, er-gainin' on me. I'm sorter gettin' 'xhaustered, so I sets de reel-drag harder on em . . en up he comes s'tho he furget somthin' a-comin' after it lak er streke er greezed lite-nin' shootin' cross de hebbens . . ZZZZZZZZ SSSSS ZZZZZZZZ En I takes 'nuther peek et him, . . or wuz it a warnin' en thret Joe jess keeps a 'visin' me ter hold him, . . . Dis fish's boss, ses I, en I'm reddy en willin' ter git fired, 'cause I dun got e'nuff Flash-s crost my mind as ter how dese pow'r'ful felluh-s jumps inter de boats, a-smashun legs, haid, en people en things in genurul So I makes up mah mind thet if dis fish feels eny better in dis boat I'se goin-ter git outer de skiff . . . ZZZZZZZZZZ. SSSSSSS. Over he wint lak a wheeze, en twuz all I c'ud do ter keep im frum smashin' my rod, en me too, ez he pass o'er-haid us, ZZZZZZZZ. . . . SSSSS ZZZZZZ.

* * * *

Aftuh more en more uv dis ever-lastin' cussedness I jess jabs de rod down sudden-lak, en a-fore Mister Tarpum unnerstands whut's happen he wuz swung 'round de stern.

"Now," sez I, rite determin' lak, "cuss yer en yer kind." Ye dun got me mad, now, en I'll fix yer ef I dies in de 'tempt ZZZZZZ But he jess jerk his gosh-dern haid so hard he most jerk me ouden de boat.

Dis varmint ain't nevah done no two things a-lak He turns a few compleat sommer-sets up thar, en I thot onced he bit hissef on de tail whilst he wuz doin his akrobatik stuff. . . . Den he made a-nudder awful rush ter de bottom; he must-a grow'd laigs down thar en wrapped 'em on somthin' on de floor ob de Gulfo-De-Maxico. . . . Grady wuz just watchin' while I kep' wearin' mah arm off pumpin' en wreslin' wid im,

hollerin' lak de Seminole Injuns on de wah-path. I nevah paid de fish no mind, jess kep, on er-pumpin, gainin' on im by inches at furst, den 'most er foot, den a whole yawd, sebbereal yawds at de time, en a-fore I know'd it a bunch er line gave 'way, which I takes in fast es I kin But I sho wuz awful tired My mouf wuz dry . . my temples a-throbbin haid aiken' and knees a-tremlin' . . I wuz a reck . . . Completely 'xhorsted Den, when all seemed peaceful, honkey-donkey lak, de blamin' varmint hez 'nuther fit wid convulshuns en wint off wid 'most four hundred feet er my lineZZZZZ Den's whin I let loose sume er de hottes' languij eber used on sich 'cashuns. . . . En I 'stinctly 'members askin' Grady, by sayin' "Grady, fer Lordy's sake, take dis rod, take it, O' plese do, else cut de line er cut my throat . . ennythin', jess lemme die quick en get rid er this demon which is killin' me" En I cried, beggin furst Grady, then Joe, ter do something'. 'Cause I got enuf ZZZZZZ SSSS . . "Stan by em," sez Joe, en he tells me a smuddy joke. . . .

* * * * *

(Elapse of time : 3 hours, 13 minutes.)

* * * * *

I then gits my secon' wind, en soon decid'd whut I wuz 'bout somthin' lak sellin' 'insurance. Yes see, yer got ter land em or have nothin' ter show fer yer work Seem'd ter me many moons come en wint, a-fore I dragg'd thet key-twistin' straggler er de deep ter de skipper shout'n, drastik lak, ter Grady en Joe not ter gaff my fish, er I'd cut dere throats, 'cause I'm goin-ter mount it Den Joe, he pours me out some er thet stump-rum whin I commands im to, en I pore'd a-copula- man-sized drinks down my hatch Den all wint blank a-fore my eyes!!!!

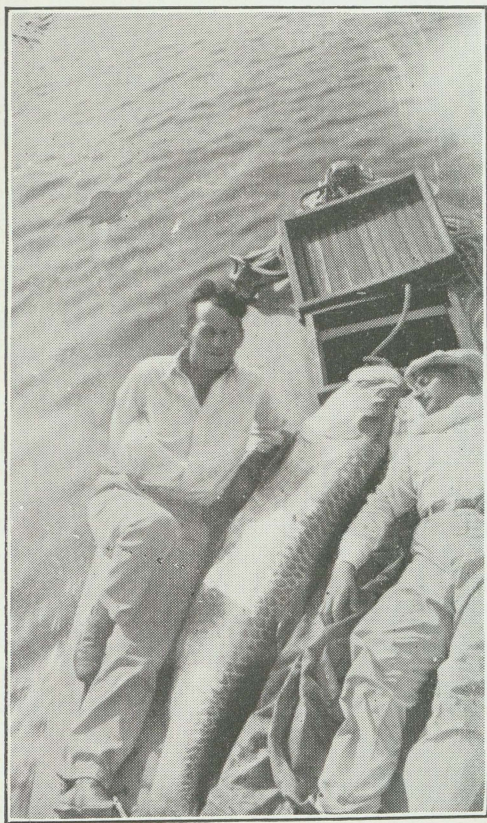
* * * * *

(Elapse of time : 6 hours!)

. . . . En whin I come to a-gin, 'count de rokin' ob de boat, sez I, "Grady, how cum is I tied up heah on de top er dis boat, 'longsides wid dis heah fish?"

Aftuh er stretch en a smoke I gits up, en gathers strength ter ask Grady what time it is When he tells me whut happ'ened en thet I been sleepin' fer more'n six hours next ter de tarpum, wal, I jes thot de dern boat-capn drunk wun too miny en wuz tellin me er fish story.

Imagine!



"KNOCKED OUT"

Unconscious more than six hours after
3-hour ferocious battle with this giant Tarpon.
Weight 138 lbs. Length 6½ ft.
(Mounted by Victor Brown, Taxidermist,
Everglades, Florida.)

VERDICT—The Skipper-Judge speaks :

“The plea of HOMO SAPIENS, the defendant in this case, is eloquent. It is proved that Mr. Fish, by his own willing, overt act changed the course of its destiny. Mr. Fish is dead. Out of respect for its individual sportsmanship the devout sea-angler in this case leaves his embittered feelings and harsh memory behind. Both man and fish have established reputations for excessive intrepidity and supreme courage in the face of heated battle.

“Being in position to analyze the motives and assess the consequences, the jury is carried beyond pure justice. While the admission of the testimony given has removed the stigma, under these extenuating circumstances, it is not proper that HOMO SAPIENS be returned to the ordeal of everyday life.

ORDER—

“Therefore, it is ordered: HOMO SAPIENS, the defendant, is sentenced to spend as much of the remainder of his life-time as economic conditions permit in the companionship of his chosen contemporaries while he is performing his labor of love—deep-sea fishing.”

HOMO SAPIENS' COMMENTS—

“Your honor: the sentence will be duly and well served. But, in closing, allow me to remark: Generally speaking, an uninitiated sees a fish aquiver on terra-firma, without any arms or legs, helpless looking, demure and innocent-appearing. I admit that he in that benign, miserable condition looks pitiful. Actually, the fish is adding hypocrisy to his other sins. Pity he evolves only from the inexperienced. For devout anglers (be he of the edible species) the fish forms the principal victual for a nutritious banquet. It is his most important function in life.”



—The END of the Fish and This Book.

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CHART No. 1112—U. S. COAST & GEODETIC SURVEY
(By special permission. Not to be used for navigation.)

5 10 15 20 25 30
NAUTICAL MILES
5 10 15 20 25 30
STATUTE MILES

A nautical mile is 6080 feet, or one minute of an average great circle of the earth. A statute mile is 5,280 feet.

SOUNDINGS (off-coastal figures) in FATHOMS
HEIGHTS (above water) in FEET
at mean low water. (See Page 23)

ABBREVIATIONS

Bn. beacon.
Lights: F. fixed, Fl. flashing, Occ. occulting, W. white, R. red,
Alt. alternating, Gp. group, Sec. sector, m. miles,
min. minutes, sec. seconds, cv. every, vis. visible.
Color white unless otherwise indicated.

Buoys: C. can, N. nun, S. spar.

C. G. Coast Guard Station, R. Bn. radio beacon.

M. mud, S. sand, G. gravel, Sh. shells, P. pebbles, Sp. specks, Cl. clay,
St. stones, Co. coral, Oz. ooze, Mrl. marl, Wd. weed, bk. black,
wh. white, rd. red, yl. yellow, gy. gray, bu. blue, dk. dark, lt. light,
gn. green, br. brown, brd. brd., sft. soft, fne. fine, crs. coarse,
rky. rocky, stk. sticky, brk. broken, lrg. large, sml. small, stf. stiff.
P. D. position doubtful. E. D. existence doubtful.

